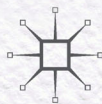




Stephen Crocker

**BERGSON
AND THE
METAPHYSICS
OF MEDIA**



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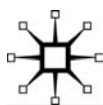
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Bergson and the Metaphysics of Media

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In memory of James Bradley, teacher and friend
Omne quod movetur ab alio movetur

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Introduction

Any-Moment-Whatever: Elaborating Bergson's Ideas

In 1969, IBM hired the pop Zen guru Alan Watts to teach its engineers about the spiritual dimensions of the new science of information. The celebrated author of *The Way of Zen* and *The Joyous Cosmology* tells his students that the findings of Gestalt psychology, neuroscience and various Eastern religious practices suggest that we learn not by the mechanical dissection of our environments, but through organic pattern recognition. Our encounters with the world are less like an eighteenth century industrial machine which processes functions in sequence, and more like a photographic plate, which comes together all at once, as a whole organic process.¹

Watts invites the new engineers to consider the difference between 'goeey' and 'prickly' thought. Prickly thinking divides the universe up into manageable bits. It takes 'bites' out of the real and produces 'thinks'. Goeey thought, on the other hand, gives us field recognition, continuity and organic formations. For prickly thought, the world is a set of discrete static bits, while the goeey mind sees only one moving continuum.

Prickly thought has been the motor force of all the mechanical wonders that the West has produced over the past several centuries but, Alan Watts tells his new students, it has now reached its limit, and rather than helping us to flourish, it threatens to destroy us and the natural systems on which we depend. The linear control mechanisms are now so sophisticated that they have begun to interfere with the processes they regulate. If a Zen guru and systems engineers have something to learn from each other, that is because they are equally concerned with this timely problem of 'control', as a relation between organic processes and the mechanisms that we use to order them and make them serve our purposes.

Alan Watts presents the goeey and the prickly as a clear opposition between Eastern and Western ways of thinking. Western man has a

linear, mechanical relation to the world that grows out of the Judeo-Christian principle that we are originally sinful creatures who require some externalized authority to control our nature. To escape the spiritual abyss of Western 'mechanism', Watts, along with countless other sixties figures from Alan Ginsburg and the Beatles, to Timothy Leary and John Cage, look to other systems of thought – Chinese and Indian – for some alternate conception of man that might lead us out of the prickly, mechanical world back to the primordial goo of the things themselves. They shared what was then becoming a common thesis that mechanism is not just a form of technical organization, but a larger spiritual and cosmological way of being in the world, that affects the most basic problems of how we understand ourselves and our relations to others. Since prickly thought now touches all aspects of life – from the pleasures of sex to the reception of art – the task we face is daunting. Only a whole different cosmology or, playing on a famous phrase of Heidegger's, only someone else's God can save us now.

But you did not have to visit the high-tech labs of IBM or the dimly lit ashrams of Northern California to be attuned to this difference. By the 1960s, anyone with a critical impulse had come to the conclusion that the West is in crisis because the mechanical forms of organization that have defined it since the Middle Ages could not adequately deal with the multiplication of information and sensations, and the new possibilities of being and thinking that had emerged since the mid-nineteenth century. The prickly and the gooey was a distinction equally useful to information theory, religion, aesthetics, sexuality and the politico-economic critique of capital. The mechanical, fragmented man of an earlier modernity was out of place in a multidimensional world of simultaneous information and feedback loops.

The human condition, it seemed, was not to be found in any of our technical accomplishments or sedimented habits, but in our inescapably mediated nature. We had moved, as Michel Serres summarized, from the age of Prometheus, god of labor, to that of Hermes, god of information. Homo Faber, man as maker or laborer, gave way to man in the middle, man in between reception and transmission, planning and execution. Homo Intervallus.

Metaphysical media: the Kantian turn in media studies

Alan Watts' lectures resonate with the sixties rebellion against all things square and bureaucratic, but they also direct us to a wider, ongoing set of concerns that form the subject of this book. Watts' presence at IBM

makes it clear that media had begun to offer not only technical solutions for organizing information and production, but insight into the complex machinery of human consciousness. What was at stake here was not a message the machines conveyed, but something more abstract and, even, metaphysical. Marshall McLuhan captured the excitement surrounding this new philosophical vocation for media studies when he explained in one of his letters that he is not a 'culture critic' but rather 'a metaphysician interested in the life of the forms.'²

By the 1960s, we began to see the cumulative effect of what might be called a Kantian turn in media studies. Just as Kant had directed philosophy away from the objects of reason to the conditions under which any thought at all might appear, so the thinkers and ideas I study here, from Henri Bergson on, see in the emerging new media an opportunity to think back from the content of messages to the 'metaphysical' problem of mediation. They all arrive, if through very different routes, at a similar dilemma that concerns an incompatibility, or 'non-synchronicity', between thinking and its 'medium'.

For some, the problem was that our media had already achieved new organizational possibilities, but our thinking had not caught up with their potentiality. Watts' message at IBM, for instance, was that the information machines already operate in a gooey mode, even though our thinking remains prickly. Marshall McLuhan set out from a similar position: Our media now place us in 'three dimensions', even if we continue to think on single planes. As long as we relied on a nineteenth-century mechanical philosophy, we would never appreciate the wonders that our machines were capable of realizing for us, or with us anyway. Walter Benjamin thought that the shock effect of modern media offered us insight into the nature of time, and the way that we connect long and immediate experience, while Gilles Deleuze argued that philosophy since Bergson, or maybe even Kant, already had the resources for thinking beyond Cartesianism, but the 'image of thought' offered by our media had not sufficiently developed to make this apparent. According to Deleuze, it was only with the development of post-war art cinema, and its new configurations of sound and image, that that we could recognize in our media the wider transformation in time and movement that philosophy had already achieved.

Depending on whom you read or followed then, media since the telegraph and photography promised to provide a description of divine intelligence (McLuhan), a Kantian model of the architecture of reason (Gilles Deleuze, Michel Serres), or they altered the human sensorium and gave us new insight into our relation to our bodies and the collectivities

we formed with others (Walter Benjamin). In all these ways, the decline of mechanism and the emergence of the then new media – ranging from film and electricity to computers and prosthetics – opened up new kinds of philosophical problems for the humanities and the social sciences that all returned to Alan Watts' basic distinction of things gooey and things prickly: a mechanical form of organization that divides life into discrete elements vs. another in which mediation – connections, middles and relations – becomes the new first principle of thought.

Mechanism as 'incomplete modernity'

In this change, media were not only the objects to be considered. They were also the facilitating condition of this thought. The limit and breakdown of a particular kind of medium, which we might call simply 'mechanism', opened up new insights into the nature of mediation.

McLuhan liked to point out that we only recognize the media-specific qualities of our devices – the way they structure background experience – when they no are longer operative. It is only when an old medium (say, the strictly linear and real-time playback of the record album) is obsolesced by the broader manipulability of the digital MP3 that we first become aware of the specific limitations that the older medium had placed on its content. The obsolescence of a medium lets us see its conditioning effects that had remained invisible to its users as long as it was in use. As mechanical media were outmoded by the new electrical devices of television and computers, mechanism began to reveal its media-specific properties and the social and conceptual world that it produced.

And what its obsolescence revealed is that mechanism, in all its various forms – technical, philosophical, aesthetic – is not defined by any end it helps to achieve but rather by a certain logic of organization, or a relation of means and ends. McLuhan defined mechanism as 'a model of aggregation... [which is] is achieved by fragmentation of any process and by putting the fragmented pieces in a series.'³

Whether it takes the form of the factory production of commodities or the organization of shots in a film, mechanism is a medium in which any given whole – Greek or Christian ideas of unity, peasant life worlds, or the human body itself – is disassembled and rendered into a set of discrete, atomic units that can be reorganized over and again to serve some new purpose. This is true whether the mechanism we are speaking of is the complex body of a farm animal that is broken down into a set of routine, predictable functions, or a worker who becomes a quantity

of labor time. As we shall see, it is equally present in the modern image of the mind as a machine that links together the clear and distinct ideas of Descartes or the separate sense impressions of Hume. We find this logic of decomposition and reconstruction in the fifteenth-century aesthetic revolution of perspective, which builds a painting of distinct planes, and the later, more modern development of filmic montage that reconstructs actions from discrete photographic cells. The 'mechanical' dimension of each of these developments is defined not by the particular kind of device that it employs, but simply by this prickly operation of dissolving wholes into atomic units and reassembling them into new aggregate forms.

This book examines the way that Henri Bergson's critique of 'mechanical thought' gave rise to a new interest in the nature of association, change and medium. More precisely, I am interested in how Bergson's critique of mechanism found its way into a new kind of 'media theory' that concerned itself neither with the meaning conveyed by signs, nor the political economy of their production, but rather with the nature of mediation itself. The decline of mechanism opened up new metaphysical opportunities to think about the nature of intervals and media. The atomic elements of a mechanical structure – whether in the fields of aesthetics, science or philosophy – must enter into a common medium of association where they can interpenetrate and influence one another. Science, Bergson claimed, developed a powerful method to dissolve unities into these atomic elements, but it did not develop a sufficiently rigorous understanding of the mechanisms of association in which these parts act on one another to produce change. Science required a theory of association and interval, which Bergson set out to provide.

From essential moments to any-moment-whatever

Bergson shows us how the mechanical thought that reorganizes modern life emerges out of a long historical struggle to break up older Greek and Christian ideas of unity. The great diversity of being – the array of sensations, beings, states of mind, the world in all its myriad of wonders – is held together in some kind of organizational pattern, or logos. But how should we understand the relation of this order to the elements it organizes? In Aristotelian cosmology, the order of things is a problem of physics, specifically of time and movement. The diversity of Being is held together by structures of movement. Falling bodies, for instance, are explained by a tendency of things to move toward the center of the earth. The task of the scientist is to describe the most salient points

of a moving body's trajectory. Thus, the culminating point of a movement – its telos or apogee – is a fixed moment with certain essential qualities that gives the whole trajectory of the movement its character. The elements of Being possess specific qualities that animate them and direct them toward given ends. Greek science then consists of a qualitative description of these privileged moments.⁴

Modern, mechanical thought dismisses all talk of essential moments and instead turns its attention to the empirical and immanent properties of the things themselves that change. Modern science establishes laws of motion and mathematical equations that plot quantitative variations among a set of moving bodies. Kepler, for example, gives us a law that will establish the relative position of any moving body, at any point in its trajectory. Every moment counts, and none of them is more important than any other. Any given unity – material or ideal – can be dissected into a series of 'any-moments-whatever'. 'Any' moment because the instant itself has no special telos. It does not possess any particular quality, or provide any direction. It does not offer any specific way of dividing up the whole. It is a function of the set in which it participates. Bergson writes:

For a Kepler or a Galileo time is not divided objectively in one way or another by the matter that fills it. It has no natural articulations. We can, we ought to, divide it as we please. All moments count. None of them has the right to set itself up as a moment that represents or dominates the others. And, consequently, we know a change only when we are able to determine what it is about at any one of its moments.⁵

So, where the ancients studied change *en bloc*, the moderns divide it into discrete and anonymous periods – T1, T2, T3. Science gives us a description of these separated moments in their isolated form. It reconstructs a whole, or unity, from a set of them, which it may then divide up and reassemble in any way.

Consider the difference between ancient and modern geometry:

The science of the Ancients is static. Either it considers in block the change that it studies or, if it divides the change into periods, it makes of each of these periods a block in its turn: which amounts to saying that it takes no account of time....For the ancients, geometry was a purely static science. Figures were given to it at once, completely finished, like Platonic Ideas. But the essence of the Cartesian geometry

(although Descartes did not give it this form) was to regard every plane curve as described by the movement of a point on a movable straight line which is displaced, parallel to itself, along the axis of the abscissae, the displacement of the movable straight line being supposed to be uniform and the abscissa thus becoming representative of the time.⁶

Marx based his critique of political economy on a very similar insight. The modern invention of wage labor rests on a buying and selling of labor time that separates the life of the worker from the quantity of empty time which he sells. These blocks of time can be organized and arranged according to external schedules that are formed independently of the life world of the laborer. The moments of the day, like points on a Cartesian grid, have no special qualities. They are quantified units that can be arranged together in different combinations for different ends.

Bergson's critique of mechanical thought found its way into the most unexpected of places: from the ideas of Marshall McLuhan and Gilles Deleuze, to Walter Benjamin and Michel Serres, and the range of thinkers they, in turn have influenced. Walter Benjamin, for instance, describes the 'empty, homogeneous time' of bourgeois society where all moments are the same because they are equally devoid of meaning and determined by their position in the series in which they have been reassembled.

At the turn of the twentieth century, many people were complaining about the inhuman, alienated quality of modern mechanical thought, whether this meant the indifference of capitalism to the life of the worker whose time it divides into any moments whatever, the spiritless dissection of nature into a productive machine that serves our purposes, or the bland image of the mind as a machine that processes distinct ideas. For some, this led to a rejection of modernity and a desire to return to the world we had lost. For others, the problem was knowing toward what end all the frenetic movement of industrial life might be heading.

Bergson's approach is different and, I would argue, ultimately more interesting. For Bergson, modernity is not defined by any specific political event such as the French Revolution, nor by a mode of production, or industrial development. It is not the machine age, or its division of labor that Bergson describes, but a more basic transformation in the relation of time to the activities that occur within it. He is now often considered a romantic, backward-looking thinker obsessed with interior psychological states. But this caricature leads us away from the most exciting and productive elements of Bergson's ideas. Bergson is not a reactionary

thinker. In fact, the opposite is true: he wants to carry forward the revolution in thought and experience that science and mechanism began but did not complete.

The complimentary science of intervals

Bergson's thesis is that mechanical thought originated in an effort to overcome the Greek and Christian image of unity, but ultimately failed in this task. It accomplished only a limited, incomplete revolution because it did not develop an adequate understanding of time and intervals. When science set out to explain movement without reference to any external, otherworldly cause, it presupposed a concept of time as not only a measure of a pre-given motion, but also as a generative force of invention and differentiation. Science breaks down the continuum of movement into a set of sterile elements of T1, T2, and on. In order that change be initiated and pass along a line of these instants, however, the first instant, T1, must possess the capacity both to exhaust itself and to generate the conditions for the second instant, T2. This supposes some milieu, or medium in which the two elements participate together. What science did not provide was an analysis of this medium or 'whole' in which 'any moments whatever' work together to produce a cumulative effect. And because it did not develop its own concept of change, it could not help but to carry along the ancient image of time as a static and accomplished fact. Modern mechanical thought replaced an *a priori* unity – God, prime mover – which pre-exists movement, with a new image of unity as a composite form to be assembled after a set of elements have appeared. What remained the same, though, was an image of the whole of time as an accomplished, or accomplishable fact. The scientific whole is given *a posteriori*, after the elements are assembled in a set. But it is still a given whole, separate from, and ruling over, the elements of a set. Bergson's position is that the whole of modern empiricism and science remains, therefore, an atemporal whole. Science dissolved the big transcendent, fixed unities of the Greeks into a set of tiny immanent unities. But this development, massive as it is, still skips over the interval where the change in movement takes place:

Science may consider rearrangements that come closer and closer to each other; it may thus increase the number of moments that it isolates, but it always isolates moments. As to what happens in the interval between the moments, science is no more concerned with

that than are our common intelligence, our senses and our language: it does not bear on the interval, but only on the extremities.⁷

In these passages, it is clear that Bergson does not wish to return to any pre-modern or interior psychological state. His project is to develop the metaphysics that mechanical thought presupposes but does not think:

But, for a science that places all the moments of time in the same rank, that admits no essential moment, no culminating point, no apogee, the flux of time is the reality itself, and the things which we study are the things which flow. It is true that of this flowing reality we are limited to taking instantaneous views. But, just because of this, scientific knowledge must appeal to another knowledge to complete it. While the ancient conception of scientific knowledge ended in making time a degradation, and change the diminution of a form given from all eternity on the contrary, by following the new conception to the end, we should come to see in time a progressive growth of the absolute, and in the evolution of things a continual invention of forms ever new.⁸

Because it does not bear on the interval, but only on its extremities, scientific knowledge must appeal to another knowledge to complete it. The object of this missing science is the interval or medium in which 'any-moments-whatever' are assembled together. Here is where Bergson's thought opens up the space for a new metaphysics of intervals and media.

'Elaborating' Bergson's ideas

The philosophical element of any work, Giorgio Agamben has suggested, is its capacity for elaboration.⁹ Our interest in the ideas of another concern not only their truth content, or how well they reflect the reality they describe, but what can be done with them. In what new direction can an idea be pushed? With what can it be mixed? What new realities can it help illuminate?¹⁰ In a similar spirit, my aim here is to pick up on some central elements of Bergson's 'complimentary science' and to show how they have been mixed in with various degrees of Catholicism, Marxism, phenomenology and structuralism to produce a science of association and interval, in other words, the other science to which science must appeal.

I follow three themes that emerge from Bergson's analysis of the scientific instant. These are: (a) the contradictory nature of intervals, which we regard as both means and obstacles to the realization of events; (b) time, and its complex interdependence of synchrony and diachrony and, lastly, (c) the philosophical interest in various kinds of sensory motor breakdown and 'unanswerable situations' as heuristic devices for understanding how mechanism and time are bound up in one another.

The first part of this book examines the nature of intervals in Bergson's philosophy of discrete and continuous multiplicities and then goes on to show how it is elaborated in the media philosophies of Gilles Deleuze, Marshall McLuhan and Michel Serres.

Their many differences aside, Deleuze and McLuhan share the view that mechanical thought does not (or does not only) alienate us from what is real, but prepares us for a more intensive engagement with relations and intervals. Both develop this principle into a very unusual sort of media studies. Their interest is not in the semiotic meaning of the message conveyed, nor the political economy of its production. Instead, they try to think backwards, as it were, from the properties of specific media to insight into the nature of mediation as such.

In Chapter 1, I show how Deleuze and McLuhan see the emergence of film, in particular, as a pivotal point or 'break boundary' between the mechanical, discrete structures of early modernity, and the continuous organic forms of organization that now become thinkable as the mechanical world breaks up. In their very different kinds of media studies, we can trace the convergence of two branches of Bergsonism – a Catholic and phenomenological one – that see in Bergson's opposition of discrete and continuous organization a theory of media and relations.

In his *Cinema* books, Deleuze uses Bergson's critique of scientific time to construct a history of the modern image of thought. He rewrites Andre Bazin's thesis on deep focus cinematography as a Bergsonian story about the evolution of intervals. For Bazin, deep focus is significant because it provides a more accurate representation of reality. For Deleuze, the deep-focus shots of Orson Welles and Jean Renoir accomplish something altogether different. Deep focus continues for our time '... a transformation in thought that first took place in [the Baroque]...' and changed the way we think about unity, multiplicity and intervals.¹¹ At the centre of the baroque revolution is a battle over flatness and depth in the composition of images and concepts. Deleuze's thesis here is that deep-focus cinematography broke away from the flatness of early film, in the same way that the baroque concern with recession and shadow grew out of a critique of the linear geometrics of Renaissance perspective.

Seventeenth-century baroque aesthetics pushed the mechanical structure of perspective to the limits of its representational capacities and made art out of the relations that hold these lines together.

As we shall see, the baroque interest in recession opens up new ways of thinking about the evolution of the philosophical image of thought as it moves from the flatness of Hume's sense impressions to the depth of Kant's transcendental idea. Modern painting, film and philosophy evolve in a similar way: in each of these fields, we find that an initial effort to overcome a static image of unity is first, imperfectly, realized as a mechanical organization of discrete parts (discrete lines in perspective, discrete impressions in empiricism), the critique of which then leads to a more intense 'Bergsonian' exploration of the relations and intervals that hold those parts together.

In McLuhan, we find a very similar story about the evolution of media from flat to deep structures. The atomizing qualities of the letter and the 'Gutenberg galaxy' shaped the mechanizing tendencies of early modernity. The coming age of resonance would have a multidimensional, 'deep' immersive quality that McLuhan likened to Bergson's collective conscience and an older Christian idea of common sense.

These analyses of mechanism, depth and relation then lead us to a central Bergsonian problem: A medium is a necessary means to convey change, but, because it can be speeded up and made more efficient, we also experience it as obstacle in the way of a more effective delivery of a message. This contradiction – where the medium of change is both a means and an obstacle – leads to a number of important and difficult questions: What must mediation be if it does not go away? Why is there is always a middle? Can the means be considered independently of the content that passes through them?

Michel Serres' work on 'noise' takes this seemingly contradictory quality of the medium (as means and obstacle) in new and interesting directions. Noise, as Serres informs us, is not itself a medium but always indicates the presence of one. Communication requires, at the very least, the presence of two different stations and a means of moving between them. The message has to move thorough a middle, and each middle, it turns out, has its own distinct properties that affect the message in precise ways. The medium is not only a conduit but also a 'space of transformation' where something happens to the message. From the point of view of the sender who wants to produce a specific effect, this affective capacity is interference, or noise. This is precisely where Serres' philosophy of communication really begins – with the ineradicable noise of the medium. The point here is not to make Serres a Bergsonian, though

he himself has made that claim, but to show how his work contributes to, or ‘elaborates’ the complimentary science of intervals and clarifies the relations among mechanism, medium and multiplicity.¹²

Synchrony and diachrony

The second part of the book follows this paradoxical nature of the medium (as simultaneously means and obstacle) back to the other great Bergsonian theme of time, or duration, specifically by exploring connections between Bergson and Walter Benjamin.

Benjamin, of course, knew of Bergson’s work. In fact, as Peter Fenves points out, he and Heidegger were classmates in Heinrich Rickerts’ 1913–14 seminar on Bergson.¹³ In his book on Baudelaire, Benjamin admits his cautious admiration for Bergson. Cautious because, while he admires Bergson’s thesis that ‘experience is a matter of time’ as he puts it, he complains about the way that Bergson privileges the romantic insight of poets and valorizes the hazy memory of pre-industrial experience.¹⁴ Nonetheless, while Benjamin does not acknowledge it, he is closer to Bergson than he admits, and there is much to learn from drawing out the correspondences and affinities among them.

Benjamin’s *Theses on the Philosophy of History* shows us how the effort to tame and eradicate the medium produces a culture of immediacy that is intimately tied to a politics of crisis and emergency.¹⁵ In an instrumental world of capitalism and the ‘totally administered life’, the contingency of the middle is a danger that we try to neutralize with risk planning and emergency measures. The more the middle interferes in our plans, the greater the desire to eliminate it more effectively. More recently, Giorgio Agamben has picked up on this theme and shown that what Benjamin directs us to is a politics of means and intervals that has only become more relevant since Benjamin’s time.¹⁶ Considering Benjamin in this light – as a thinker of intervals, media and means – leads us to a deeper correspondence between his program and Bergson’s.

In his work on memory and the sense of the past, Bergson tries to surpass the simple opposition of discrete and continuous forms of organization to understand the medium in which they participate, which he calls ‘the Past in General’. In Benjamin, we find something similar expressed as an effort to wrestle free of a dichotomy of long and immediate experience.

The starting point for each is the way that modernity destroys the older, longer cycles of feudal time and produces a new hyper-kinetic culture of immediacy. Where feudalism privileged the diachrony of

the *longue durée*, modernity tips the scale toward the synchrony of a perpetual present of radically distinct, empty homogenous moments. Benjamin's critique of the temporal structure of modernity arrives at the same difficulty that Bergson identified in evolutionary science. Scientific, aesthetic and economic modernization breaks up the great transcendental (auratic) unites into countless tiny units (any moments whatever) which, however numerous, nonetheless each maintains the same discrete structure of unity and completion as the whole that they had decomposed. Benjamin's critique of 'immediacy' and empty homogenous time does not try to get back to older values of continuity and diachrony. Instead, Benjamin tries to think his way into the interval that links together long and immediate structures of time.

Bergson's concerns are similar. It is true that in his early work, Bergson privileges continuous duration over discrete fragmentation. In his later works, however, he tries to wriggle free of this simple opposition as he sets out after what he calls 'the pure past', or 'the past in general'. This is not a tense (as in past, present or future) but rather the quality of time that links synchrony and diachrony and lets time present itself in these two different ways. Thus, in spite of the enormous distances between them – the Catholic mysticism of Bergson, the Jewish dialectical Marxism of Benjamin – the critique of mechanical time leads them to a similar aim to overcome the opposition diachrony/synchrony and find a way into the interval in which these two very different modes of being in time find their common origin. The comparison of Benjamin and Bergson leads us then to a third and final 'Bergsonian' theme of sensory motor breakdown.

Breakdown

Despite the common perception of Bergson as a thinker of continuity and duration, his metaphysical insights most often set out from experiences of disruption and breakdown. When our habits or 'sensory motor schemas' are interrupted, our perception takes leave of the immediate and practical problem at hand. This separation of our actions from their habitual structures lets us focus more intensively on how an event is taking place, rather than what it means or accomplishes. When we cannot recall someone's name, for example, we are compelled to think of all the possible associations and memories that might make it intelligible. From there, we may be led to more general – metaphysical – considerations of how the past participates in the present. Against the common caricature of Bergson as a vitalist who wants to turn back from

the machine age to some more immediate relation to life, or *élan vital*, I try to draw out a more complex picture of his interest in breakdown and interruption. This theme finds its clearest articulation in his essay on Laughter.

We laugh, Bergson claims, when the mechanisms we impose on life – mechanical, linguistic or conceptual – fail to capture and regulate it. After Bergson, this interest in mechanical breakdown is frequently tied to an historical thesis about the novel, or, as I call them, ‘unanswerable situations’ that characterize modernity. The destruction of tradition, the permanent obsolescence of capitalism and the continually updateable expert systems on which we depend, all break down the familiar cardinal points of order. Benjamin, for example, is interested in what can be learned about the human sensorium from the shock effect of modern media. We find this same theme of ‘truth in broken mechanisms’ and ‘unanswerable situations’ in Deleuze’s work on the importance of sensory motor breakdown in neo-realist cinema. We see it repeated in the role of interruption in Bertold Brecht’s ‘gestic’ theater and then again in what Giorgio Agamben has more recently called the ‘crisis’ of gesture. In each case, the analysis of broken mechanisms and interrupted gestures leads us back to a basic dilemma of human finitude: We cannot bypass the mechanical contrivances we force on life, but we can be attuned to those moments when there opens up a discord between machine and spirit, signal and noise. Thus, the value of the complex relation to mechanism and modernity that Bergson announces: We are not reducible to the apparatuses and devices that dissolve our time into any-moments-whatever, but we may have no other place to look for insight into ourselves but there.

Part I

Medium as Means and Obstacle

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1

Metaphysical Media: The Discrete and the Continuous in Deleuze and McLuhan

Two branches of Bergsonism: phenomenology and Catholic modernism

On the surface, nothing could be further apart than the technological determinism of Marshall McLuhan and the ‘transcendental empiricism’ of Gilles Deleuze. Nonetheless, *Understanding Media* and the *Cinema* books both look to the birth of motion pictures for insight into the nature of thinking itself. In the movies, McLuhan and Deleuze see a new image of thought that is no longer based on a Cartesian model of a machine linking discrete cells of activity, but on the active role of ‘resonant’ or ‘irrational’ intervals, in which the interstice or medium between events plays an active role in the creation of the sense that passes through it. For both, film’s significance is not only aesthetic or technical, it is also metaphysical. Film is a break boundary, as McLuhan puts it, between discrete and continuous forms or organization that offers us some new kind of insight into the nature of relations and intervals.

In this unexpected affinity, we can trace the convergence of two branches of Bergsonism that had split apart earlier in the century. One secularized version of Bergsonism passes through Georges Sorel, French existentialism, the phenomenology of Merleau-Ponty, Jean Hyppolite and Emmanuel Levinas, and on into the great Deleuzian ‘poststructuralist’ themes of multiplicity, time and difference. We should distinguish this stream of thought from the Catholic Bergsonism that passes from Bergson’s students Edouard le Roy and Etienne Gilson to Jacques Maritain, Charles Peguy, and on down through Pierre Teilhard’s Utopian Catholic idea of a noosphere, and then into mid-century Thomism, and what came to be called Catholic modernism. It is in this latter trajectory that we will first locate McLuhan’s media philosophy.

Bergson, McLuhan and Catholic modernism

Pierre Tielhard, the Jesuit priest paleontologist, ex communicant and all around visionary is perhaps the best known figure in this tradition. In *The Phenomenon of Man* and *The Divine Milieu*, he saw in Bergson's *Creative Evolution* an invitation to spiritualize science and reconnect it with the Christian tradition.¹ Tielhard drew on Bergson's image of *élan vital* to develop an understanding of God as a principle of complexity and evolutionary dynamism that led the world from a geosphere to a biosphere to, finally, a noosphere, or medium of thought and consciousness that surrounds the planet.

In *The Gutenberg Galaxy*, McLuhan embraced Tielhard's vision of a noosphere and developed from it his idea of an emerging global village made possible by the world wide simultaneity of electric media.² How far McLuhan followed Tielhard is hard to say. Did he endorse the idea of the 'Christosphere' that was supposed to follow the noosphere, or the Omega Point, the final telos of history, recently the subject of a novel by Don DeLillo?³ In a video made in collaboration with McLuhan's daughter Stephanie, the writer Tom Wolfe suggests that McLuhan did not publicly acknowledge the full extent of Pierre Tielhard's influence on him because the author of *The Phenomenon of Man* had been shunned by the Catholic Church, whose influence McLuhan felt through his association with St. Michael's, the Catholic college at the University of Toronto, where he taught.⁴

Tielhard, however, was only the outer edge of a much larger, early twentieth-century movement of neo-Catholicism, or Catholic modernism, one version of which thrived at the University of Toronto and influenced McLuhan's approach to media studies. Arthur Kroker explains that '...even as he studied the "maelstrom" of high technology, [McLuhan] never deviated from the classical Catholic project of seeking to recover the basis for a "new universal community" in the culture of technology. In the best of the Catholic tradition, followed out by Etienne Gilson in philosophy as much as by Pierre Elliott Trudeau in politics, McLuhan sought a new "incarnation," an "epiphany," by releasing the reason in technological experience.'⁵

Bergsonism provided the philosophical engine for this new version of Catholicism that included among its converts T.S. Eliot, Edith Stein, Jacques Maritain, and even Bergson himself. The Catholic critique of mechanical modernity, and the embrace of Bergsonian philosophy seemed to fit well together. Catholicism's holistic vision of an emerging human community in Christ was at odds with the atomism of science

and mechanical life. In this climate, Bergson's imagery of continuity and duration promised to reorient Catholic discontent with secular modernity away from a backward-looking nostalgia for the grandeur of the medieval Papacy, and to set in a new, exciting forward-looking direction. Through the filter of Bergsonism, Catholicism now seemed to have something important to say about the technologization of man. The new man called forth by science, the man of the future, would be a Catholic. In its subtler, milder forms, Catholic Bergsonism offered a sensibility and continuity that one could find in, for example, T.S. Eliot's poetry. In its stronger, Teihardian formations, it was worked up into a near science-fiction kind of utopianism. In either case, it was Bergsonism that provided the basic imagery of a mechanical modernity and the diagnosis of the spiritual dilemma that accompanied it: Science could not provide the metaphysics it required, and so could not really understand itself. It called for another order of reflection to understand what made it possible and why it was significant. Bergson's vision of the 'incomplete modernity' of scientific/mechanical thought opened up a new vocation for Catholicism: to produce a metaphysics adequate to our mechanical/technological age. All of this then is the background climate of McLuhan's claim that his reflections on media were not a form of cultural criticism, but of metaphysics.⁶

Outside of France, where it originated, St. Michael's College at the University of Toronto was the epicenter of this movement of Catholic Bergsonism. The Pontifical Institute at St. Michael's College was established and run by Bergson's star student Étienne Gilson. McLuhan had praised Gilson in his PhD thesis, and Gilson, in turn, had been influenced by McLuhan, particularly in his late lectures on art. Gilson was a close friend of Jacques Maritain, who taught frequently at the Institute and pursued the relation of Thomism and Bergsonism throughout his career.⁷

Walter Ong, another St. Michael's Jesuit, and author of the *Provence of the Word* and *Orality and Literacy*, deeply influenced McLuhan's theories about the evolution of media from print to speech to electric communication. Ong recognized the Bergsonian tone that underscored McLuhan's conceptual distinctions: 'One thinks of Bergson's misgivings in *Time and Free Will* about the tendency of the last few centuries to overspatialize everything.'⁸

The critique of the atomizing machinery of science, and the vision of a coming collective image of man, modeled on a Catholic notion of community and animated by a Bergsonian philosophy of evolution, fed directly into McLuhan's hyperbolic declarations about electric media as

the externalization of common sense. In *Culture as Polyphony*, James M. Curtis claims that 'it is reasonable to assume that McLuhan originally found the concept (of technology as extension of man) in Bergson ...'.⁹

The renovation of Bergson's metaphysics allowed the emergence of a kind of media studies that concerned itself not with the message, the technique or the political economy of media, but with the more basic, even phenomenological problem of mediation itself. For McLuhan, Bergsonian Catholicism provided a way of returning to an older theological problem of 'participation', or how divine thought is revealed in the world. Media, McLuhan supposed, provide an external representation not only of our thinking mechanism but also of the divine intelligence that passes through it. Deleuze's interest, as we will see in a later section, is more immanent and recognizes in the film image a representation of the Kantian architecture of reason and of the intervallic, open nature of time that defines it. For Deleuze, what was ultimately at stake was not only a picture of the mind, but the opportunity to conceive of thinking itself as a kind of mediation between being and appearance.

Why Bergson dismissed film

Before we consider any further how the discrete and continuous found its way through the twentieth century, though, we should first recall the way that Bergson develops the idea. After all, it is strange to consider Bergson's contribution to media studies when Bergson himself dismissed film. In fact, Bergson even goes so far as to adopt the name cinematographic thought to describe the inauthentic, reified and 'spatial' caricature of thought that his philosophy opposed.

Deleuze claimed that in spite of this disavowal, Bergson's ideas contained all the essential ingredients for understanding the significance of the moving image.¹⁰ This is because Bergson dissolves an age-old distinction that places movement in the external world, and images in the mind. For Bergson, thinking is movement and mediation. The brain is an interval between the reception of sense and its execution in sensory motor schemas that combine thought and action in ways that are useful for life. Consciousness is, therefore, a kinesiology (hence, cinema), or a kind of movement. This movement of thought cannot, however, be reconstructed from discrete units because it always occurs in the interval between them. No matter how small the unit, or how precise the divisions, it is always in the betweenness – the medium – that change occurs, and this, Bergson argues, is always missing from a spatial analysis, cinema (or movies) included.

Here is what he says about it:

Instead of attaching ourselves to the inner becoming of things, we place ourselves outside them in order to recompose their becoming artificially. We take snapshots, as it were, of the passing reality, and, as these are characteristic of the reality, we have only to string them on a becoming, abstract, uniform and invisible, situated at the back of the apparatus of knowledge, in order to imitate what there is that is characteristic of this becoming itself. Perception, intellect, and language so proceed in general. The mechanism of our ordinary knowledge is of a cinematographical kind.¹¹

Because Bergson's central philosophical interest is mediation, the question he asks about the new medium of cinema is: How does it move? What happens in the middle, or the interval? On viewing the very first forms of film he finds that cinema deals with already formed, discrete cells to which it simply adds movement. It is a mechanism, Bergson concludes, that processes separate blocks of movement like the Cartesian mind processes clear and distinct ideas.

Cinema strings together immobile sections of movement with an external, indifferent time, which does not emerge from inside the moments, but is added on from outside them. The 'mechanisms of association', or mediating intervals that connect these elements are only inert means of conveying a form along a line from 'T1' to 'T2'. So, while the apparatus of cinema may be stunningly new, the form of mediation that animates it is not, and so, Bergson concludes, it does not make it any easier to appreciate the fluid and dynamic nature of thought.

Discrete and continuous media

Bergson's interest in mediation is part of a strong Kantian element in his work. Like Kant, he regards space and time not as properties of the external world, but as the background condition of thought. However, where Kant describes these conditions as pure forms of intuition, for Bergson they are kinds of mediation, or media.

Bergson's philosophy offers us a basic dualism for understanding how the diversity of life – people, sensation and objects – can be organized. Discrete multiplicities transform everything into distinct units with well-defined borders. They operate on a principle of 'mutual externality without succession'.¹² Continuous multiplicities, on the other hand, like

the structure of a melody or the sound of a dripping tap, are dynamic wholes that become qualitatively different with the addition of each new part. They operate on a principle of 'succession without mutual externality'.¹³

In the early formulation of these ideas, Bergson wraps up the theory of multiplicity in a psychological dualism of real and derived aspects of the self. Discrete multiplicities, he tells us, correspond to objects in the external world, whereas continuous multiplicities are found within the self:

Within our ego there is succession without mutual externality, outside our ego mutual externality without succession.¹⁴

Thus, we are offered two very different images of the world as a set of distinct points outside us, or a single fluid continuum we experience 'when the ego lets itself live'.¹⁵

When I listen to the tick of a clock, or the sound of a dripping tap, I gather together a quantity of distinct elements, but I also register a qualitative impression of a whole sequence. It is not difficult to multiply examples of these sorts of phenomena on which Bergson built his philosophy. The fatigue I feel at the end of the day, the progression of a disease, the intensity of the sun's heat passing through my window, the emerging realization of an idea, the conviction that I am in love or that I am no longer, all develop in time. In each case, a multitude of elements presents itself as a set that is continually altered with the appearance of each new one.

These elements, of sound or heat or light, are all distinct and occur at different times. They come from different directions, and they carry different intensities. But if I can experience them as a single physical force unfolding itself in time, that is because I can arrange their duration, intensity and regularity all under a common measure. Our sense of time and continuity has a special relation to our ability to count, and to distinguish between qualities and quantities.

In order to count the moments of a day, or the events that make up a life, we must be able to retain past elements and set them alongside those presently in view. As long as we rely on images of coexistence and adjacency, however, we are understanding time through one of the defining qualities of space, namely simultaneity. Here, then, is the difficulty that Bergson follows through *Time and Free Will*: In order to count and analyze things in succession, we must first project them into a homogenous medium in which they can be juxtaposed and counted.

Counting filters the continuous quality of time through the discrete medium of the number.

Counting and time are thus different kinds of mediation, which is to say that they deal with points and intervals in very distinct ways. Time always involves the active transformation of T1 into T2. We will never locate the transformation itself in either of these points because it takes place between them, in the interval, when T1 is no longer fully present, and T2 is not yet so.

Counting and addition are thus more complex than we might have suspected. The process by which we count units and make them into a discrete multiplicity has two sides. On the one hand, we must assume that the counted things are identical in some way, since they can be measured together. This mutual identity is, however, only conceivable if the units can be placed alongside one another in a homogenous medium. On the other hand, when we add two elements together, it is in order to obtain a third. The third unit is then the result of an interpenetration of the first two. The synthesis of this third alters the nature, the appearance and, as it were, the rhythm of the whole. Without this interpenetration and this, so to speak, qualitative progress, no addition would be possible. All quantities are produced through this work of interpenetration, synthesis and qualitative change. So, Bergson summarizes: 'Hence it is through the quality of quantity that we form the idea of quantity without quality.'¹⁶

To clarify the nature of the interpenetrating interval, Bergson separates pure space and pure time as two very different ways of mediating diversity. 'Space' is an empty, homogenous medium of extension in which elements can be arranged and juxtaposed: 'it is scarcely possible to give any other definition of space', writes Bergson, 'space is what enables us to distinguish a number of identical and simultaneous sensations from one another.'¹⁷ It is space that 'enables us to see clean-cut distinctions, to count, to abstract, and perhaps also to speak.'¹⁸

In duration, on the other hand, preceding and succeeding states are not separated from one another. In fact, the intervals allow the parts to interpenetrate and alter one another. Consciousness recalls former states, but it does not extend them in space, and it does not separate them with intervals. '[I]ts essence being to flow, not one of its parts is still there when another part comes along'.¹⁹ Bergson likens the effect to what happens 'when we recall the notes of a tune, melting, so to speak, in one another.'²⁰

We perceive musical notes permeating one another, becoming with each successive motion something qualitatively different. That is why,

when we interrupt a rhythm, and exaggerate a note, for example, we produce a qualitative change in the whole of the musical phrase. For, in duration we have an organization of elements, '[s]o solidly organized, so profoundly animated by a common life that I could not have said where any of them finished and another commenced'.²¹ So soon as we are introduced to juxtaposition and interval, however, we 'unwittingly' bring it to bear on our perception of succession and 'project time into space'.²² We arrange our states of consciousness along a line, placing them in a simultaneity in which they are no longer in one another, but alongside one another.

In his early work, Bergson uses this opposition of space and time to establish a hierarchical opposition between those organizational forms that divide up the given into elements which are external, juxtaposed, visual and discrete, and those which make manifest internal, intuitive and continuous events. He imagines a kind of battle taking place between these orders. The rigid point-like categories of discrete multiplicities are superimposed on the fluid continuous multiplicity of time. Space comes to obscure time. We regard time in spatial terms with time lines, schedules and calendars so that future events can be regarded as though they were already here in our field of vision. In this way, what is in actuality one continuous flow is broken up into a series of many discrete parts that are made to fit a measure. And what is in the process of being made is regarded as though it were an accomplished fact.

Bergson's early project is to free the unadulterated flow of time from these artificial divisions of the mechanical world. He wants to liberate the continuum from the mathematical abstraction that divides it into a series of points. His method is to show that this medium in which part and whole are mutually transformed is not only distinct from the discrete multiplicity, but is its condition of possibility.

Bergson thus presents us with two fundamentally different media for organizing the multiple nature of the given: a discrete multiplicity is defined by juxtaposition and space; a continuous multiplicity is defined by interpenetration and time. The first produces homogeneous quantities, the second heterogeneous qualities. One gives us a mechanical aggregate of separate events, the other a dynamic, organic whole. The first he considers an external property of language and social life, the second an internal experience of the ego. One is a series of points, the other is an open whole. This one basic opposition guides all Bergson's analyses from science to humor, and from music to law. As we will see now, it is also the basic tool with which McLuhan and Deleuze understand media and try to overcome mechanism.

McLuhan's inert connections and resonant intervals

Underneath all the hyperbole and punning of McLuhan's books is a Bergsonian distinction among different kinds of relations, some of which divide the world into discrete units with well-defined borders, and others which organize experience into organic structures of continuous forms with dynamic and 'resonant' intervals.

Bergson claims, for instance, that discrete media have their origin in mathematization, but virtually everything he says about numbers can be found in McLuhan's descriptions of the alphabet. McLuhan's letters break up the flow of thought into discrete bits with clearly defined intervals, in the same way that Bergson's numbers divide up a continuum into homogenous and identical qualities. Both produce the same 'environmental' effect. They give us a spatial and mechanical world. Mechanism, McLuhan liked to point out, is not a property of machines, but is a much more general organizational logic. He calls it a model of aggregation which is 'achieved by fragmentation of any process and by putting the fragmented pieces in a series.'²³

Like Bergson, McLuhan links mechanism to the visual sense. Vision is continuous, connected, homogenous and spatial. 'Visual space' is the basic organizational mode of the mechanical world, which slices reality into distinct sections and, after taking in a number of these, assembles them into an aggregate unity.

Spatio-visual organization affects not only such manifestly spatial phenomena as our ideas of geometry but the whole range of sensory experience. As soon as you begin to deal with the sensory modalities, you quickly discover that the visual mode may occur in situations that are quite unvisualizable. For example, central heating structures the thermal space of a room visually. That is, a centrally heated room has a thermal space that is uniform, continuous and connected.²⁴

For this reason, Jonathon Miller once wrote: 'McLuhan is doing for visual space what Freud did for sex'.²⁵ Indeed, the range of things that McLuhan could trace back to the media-specific properties of print was astonishing. They included:

Nationalism, the reformation, the assembly line and its offspring, the Industrial Revolution, the whole concept of causality, Cartesian and Newtonian concepts of the universe, perspective in art, narrative chronology in literature, a psychological mode of inner direction

that greatly intensified the tendencies toward individualism and specialization.²⁶

These are all part of the same explosive movement in which mechanization takes command, to borrow Siegfried Gideon's phrase, and breaks up an older theological framework of unity and wholism into distinct bits and pieces separated by inert intervals.

In *Time and Free Will*, Bergson attributes mechanization to the 'external character of language and social life'. McLuhan treats the problem in a more historically- and media-specific way. He sees the reign of the discrete over the continuous as peculiar to Greco-Roman civilization and the privilege it gives to print. 'Only Greco-Roman man has ever had this visual faculty in isolation.'²⁷ And, more specifically: ... 'The linear forms of towns and roads, and counting devices and hierarchies, goal oriented schemas, individualism and cause and effect philosophies, which have defined the West, are all outcomes of the privilege given to print and vision. As a result, Greco-Roman man tends to see everything around him as continuous, uniform, connected and static.'²⁸

All of this changes, apparently, as the unprecedented speed achieved by technology in the late nineteenth century pushed the mechanical world to a breaking point. The telegraph liberated information from the bodies that carried it and eroded distinctions such as center and margin, and origin and terminus. Electricity further amplifies this same principle of a decentered network where the system is equally present at each point. The 'governor' which James Watt attached to his steam engine used the engine's own output to regulate the rhythm of the machine. Even in this simple feedback mechanism, the output of energy is sent back as a source of input, effectively breaking the linear, mechanical model that preceded it. Here begins the decline of the letter and the hegemony of vision. 'Simultaneous information erodes all visual culture with its partial bias for the connected'.²⁹

The feedback mechanism creates a single integrated field without a center. In other words, its center is multilocal. Now, when the center is everywhere, and the margin is nowhere, the nature and function of media change. In a world without centers, media are no longer relay effects between fixed points. Every point effectively becomes a middle. The middle then becomes the basic unit of organization much like '[t]he gap or interface that is the chemical bond in quantum physics.' McLuhan calls this new kind of middle a 'resonant interval.' '[T]here are no connections in matter', he writes, 'only resonant intervals.'³⁰

Up until now, or so the idea goes, the environmental effects of media have been invisible to us. While media mediate, their effects go unrecognized. Media produce a background or milieu (an etymologically-related term) against which recognizable figures come to presence. It is only when one medium is rendered obsolete by a new one, that we can recognize the formers' media-specific qualities. New media, or electric media, as McLuhan likes to call them, change all that. Electricity, the telegraph and film in particular, represent the end of the distinction of foreground and background. Unlike previous media, they offer us an immediate reflexive awareness of the environment. This means that the new media change our relation to mediation itself. They make visible the medium, as it structures the environment. New media have a metaphysical significance because they promise to reveal the mediated nature of all human experience. Here is where film plays its decisive role in McLuhan's schema. Using the example that Jean Baudrillard liked so much, he explains that as a jet plane breaks the sound barrier, waves are made visible on its wings. In other words, the otherwise invisible medium of sound becomes visible to us at the moment that we surpass it.

McLuhan describes the birth of the movies as a similar kind of 'break boundary' or a fulcrum point where we can see how the older Greco-Roman world of sequence and mechanism gives way to a new world of electrical configuration and resonance.

Mechanization was never so vividly fragmented or sequential as in the birth of the movies, the moment that translated us beyond mechanism into the world of growth and organic interrelation. The movie, by sheer speeding up of the mechanical, carried us from the world of sequence and connection into the world of creative configuration and structure. The message of the movie medium is that of transition from lineal connections to configurations.³¹

In a film, action is broken down into separate cells of movement – truth, 24 times a second- as Godard liked to say. But the work of linking these parts together is simultaneous with the appearance of the effect produced. The movies have a sequential structure that produces an effect of instantaneity. The sheer speed of the movie linkages reconstructs all the separate cells of motion in a single gestalt. We see the screen action unfolding at the very instant that it is being reassembled inside the projector. For this reason, McLuhan writes, 'the movie

represents the zenith of mechanism, which ends sequence by making things instant.¹³²

Note that his thesis is not that the movies themselves give us a resonant interval. They represent a transitional point between connections and resonant intervals. They do not belong to either world. Film leaves behind the world of mechanism from which it originated, and directs us toward a very different kind of mediation. Its real significance only becomes apparent in the world that it makes possible. This is the world of configuration, structure and pattern, which redefined the arts, sciences and humanities in the early twentieth century. Cubism, quantum physics, abstract painting, modern poetry, and all the new forms of relativism and *gestalt* and configurational thought find their origin in this decline of sequence and mechanization, and the new importance they ascribe to configuration and structure.

Cubism, for instance, makes use of a resonant interval that presents all facets of an object simultaneously. It aims at an instant sensory awareness of a whole, instead of a fragmented and piecemeal visual effect. The new art directs us to the activity of synthesis itself and calls on the viewer to hold together a number of distinct planes of information at once. In this way, the user is now involved not only in apprehending, but also in creating whatever unity the work offers.

The whole thus created is not a sum of effects that are united after the sequence is completed, but something that is developed while it is occurring. In these cases, the interval serves not simply to 'match together' two existing elements in a mechanical sequence. Instead, it makes a sense that did not previously, and would not otherwise exist. With this in mind, McLuhan distinguishes between connections and intervals. 'If there were only connection there could be no change. The action is where the gap is. It has always been this. Change requires the resonant and abrasive interval, whether in the flow of character in the tragic hero of Aristotle, or in the chemical bond of Linus Pauling.'¹³³

The new, electric media therefore have unique media specific properties, and different environmental and sensual effects that go along with them. McLuhan describes this in terms of two different kinds of space that are modeled on the discrete and the continuous. Mechanization produces a visual space defined by discrete elements and inert connections. Electric media, on the other hand, have acoustical properties that reflect the omnidirectional way in which we hear. Since we hear from many directions at once, acoustic space tends to be a sphere 'whose center is everywhere and whose margin is nowhere.'¹³⁴

Hearing, then, is a way of understanding, as Michel Serres says. Its multidirectional quality structures experience no matter what the content of the media –e.g. radio, television – which electricity makes possible. ‘The structure of acoustic space is characteristic of electric circuitry, no matter what that circuitry is designed for.’³⁵ The message or effect of electric technology is acoustic even when it appears as print. In a later chapter, we will focus more precisely on McLuhan’s theory of the multidimensional and ‘intervallic’ quality of sound. For the moment, we continue with the properties of electric media and the Catholic image of common sense that McLuhan finds in it.

Electric media, McLuhan argues, represent a novel moment in the history of media. Electricity does not externalize any one sense. It outs the whole nervous system. The nervous system, like an electrical field, has no center. It is all simultaneously present. Electric, or instant circuits are not centralist, but de-centralist in form. ‘Our entire Western world has been structured by centralist forces, and is very much confused by electric technology’.³⁶ Electricity has an organic character. It operates through field recognition, rather than mechanical fragmentation. So, all the effects of mechanism, from the private ego and nationalism to the way we heat our rooms and make art, are all made obsolescent by a ‘resonant interval’.

The consequences of this change are not restricted to any region of experience. They are cosmological in scope. ‘We can no longer live in Euclidian space under electric conditions, and this means that the divisions between inner and outer, private and communal, whatever they may have been for a literate culture, are not there for an electric one.’ What is at stake here is the distinction between the ‘inert connections’ which characterize mechanical media, and the ‘resonant intervals’ of electric media. ‘The visually oriented person is always looking for connections rather than intervals.’³⁷

In a resonant or ‘metamorphic interval’, something results from the interaction. To illustrate this point, McLuhan liked to use as an example the Greek figure of Hendiadys –a phrase in which two linked terms produce an effect not possessed by either, such as ‘song and dance’, ‘words and music’, ‘moonlight and roses’, or ‘the one and the many’. In all these cases, the and does not simply connect. It resonates with a force that allows the occurrence of something irreducible to the properties of the things it connects. In these cases, ‘The gap or braiding interface between such components seems to resonate with great power in mind.’³⁸

In one of his letters, McLuhan develops this relation of mechanical and electric, or discrete and continuous media specifically in terms of the dialectics of point and continuum in Medieval Catholic theology. For the Medievals, the opposition of point and continuum expressed the relation between our finite intelligence and the divine omniscience of God. We see the world only in fragmented, single aspects. God, however, sees the points in which we are alienated in the wider continuum of his divine intelligence. This dialectical tension between point and continuum is preserved in the word 'pun'.

Pun, as he points out in a letter to P.F. Strawson, is derived from the word *punctum*, which is a 'drawn out point' that has stretched itself into a line or a continuum. A pun, in the literary sense, is a word whose semantic horizon extends beyond its immediate sense. 'A pun, in other words, is a point that does not have a fixed semantic position. The point is everywhere and its resonance extends to the verbal universe.'³⁹ McLuhan sees in this a way of expressing the Neo-Platonic notion of God as acoustic space whose center is everywhere. The new electric media move us from the world of points to one of continua, and so, ultimately, closer to the kind of 'noosphere' predicted by Pierre Tielhard.

Like Freud, McLuhan believed that different media externalize different sensual capacities of the body. The wheel extends the foot, as the camera extends the eye, for instance. Throughout human history, different media have externalized particular senses and placed them in 'high definition'. The new media, however, do not externalize any one sense. They are the realization of what Aristotle and Aquinas had called 'common sense'. This is not to be confused with the simple idea of an unreflective knowledge. Common sense here is the capacity for all the senses to be together in one integrated perception of the world. It is a tactility not of skin, but of percepts touching each other. It is not itself a sense, but the capacity of all the senses to be together. Daniel Heller-Roazen has called it the sense of being alive.⁴⁰ McLuhan's thesis is that electric media represent the externalization of this common sense. This is how they give us an 'image of thought' and make mediation itself the message of art. Thus, Bergson's distinction of discrete and continuous media ends here in a Catholic fantasy of the coming unification of man.

Deleuze: cinema-thought

Most readings of McLuhan play down the metaphysical, Catholic element of his work and find in it a more or less useful typology of techniques. But its Thomistic metaphysics meets up in interesting and

productive ways with the cinema theory of Gilles Deleuze. Deleuze also structures his reading of film around a distinction of discrete and continuous forms in order to show how cinema starts to concern itself with the means of mediation. For Deleuze, mediation concerns more specifically the intervallic and open nature of time. Cinema produces 'time-images'. These give us an image not only of how things occur in time, but also of time itself as the basic medium in which being and appearance meet.

To understand the nature of cinematic movement in this expanded sense, Deleuze draws on Bergson's dualism of discrete and continuous multiplicities to distinguish between two basic kinesiological structures, which seem to correspond to the making/matching, mechanism/configuration dichotomy we find in McLuhan. The philosophical lineage here, though, leads us back not to Aquinas, but rather to his successor, Duns Scotus, and to the theory of movement he developed in the effort to break away from Thomistic and Greek ideas of resemblance.

The kinostructures, or movement-images of classical cinema are the simplest forms of film image. Bergson had built his case against film with these in mind. Kinostructures are mechanical sequences that subordinate time's interval to a predetermined course of successive shots. These kind of sequences may consist of one single flat plane, like we find in early theatrical films, or a series of single planes edited together in montage, as is common in most classic Hollywood films of the 1930s. In the images it produces, the interval between two shots plays little or no creative role. It is a black box that carries out a pre-established sequence. It matches, rather than makes, to use McLuhan's terms. The kinostructures' mechanical sequence of images is either a whole that is formed in advance of its representation (as in the theatrical film), or it is a sequence that is assembled after the fact (the Hollywood shot-counter-shot). In either case, the origin and terminus of its movement 'resemble' one another. The interval is a 'reflex arc', which simply facilitates the completion of a projected movement, and the matching up of beginning and end. Deleuze says that in kinostructures, 'Time is no longer subordinated to movement, but rather movement to time.'⁴¹ In other words, the movement is already conceptually completed, and the time, or interval between shots, is a means of executing it. The interval does not resonate. It is an inert conduit.⁴²

As film develops and evolves throughout the century, its real novelty and creative possibilities emerge. Post-war cinema introduces chronogeneses, or time-images which 'reverse the relation of time and movement' and give the interval a whole new creative power. In these new shots, of which Orson Welles' are among the first, the interval between

planes, concepts or events assumes a power to produce unpredictable 'aberrant movements'.⁴³ Deleuze's comments on Welles' use of depth, which we will take up in more detail in the following chapter, are very similar to McLuhan's insights on cubism. Instead of being given a sequence of discrete planes, the viewer is offered a set, or a multiplicity of them all at once and is invited to roam around inside the shot and synthesize them.

The 'irrational interval' that links planes in modern cinema is not simply an inert connective tissue, but a principle of differentiation that plays a positive role in the creation of the image. The interval no longer works in the service of an already given movement between two ideal points. Deleuze writes: 'the interval is set free, the interstice becomes irreducible and stands on its own.'⁴⁴ The chronogeneses of post-war cinema give us emergent unties, wholes that are in the midst of creation. The message of the film is the display of its own mediating, intervallic nature.

Deleuze's 'immanent transcendence' clearly differs in important ways from McLuhan's Catholic fantasies. Nonetheless, they both see in film a pivotal point between discrete and continuous forms of organization, and a way of getting into the connective tissue that the mechanical world supposes, but does not think. More importantly, perhaps, they both recognize in cinema the opportunity to realize an image of thought that has led a long underground life and now becomes possible to think in some new way. Where McLuhan saw in film the opportunity to actualize a Christian idea of common sense, for Deleuze, cinema makes possible the realization of an image of thought as a productive, generative interval that has remained a smouldering fire flaring up in, among other places, Kant's critical philosophy, the baroque reinvention of perspective as 'fold', the early modern theology of Duns Scotus and the films of Orson Welles.

This element of Deleuze's work makes it clear that the *Cinema* books are not primarily about film. They develop a metaphysics of 'cinema' in a wider and older etymological sense of kinesis, or movement. As Jean-Luc Nancy has suggested, 'Deleuze's interest in the cinema is not just appended to his work: it is at the center, in the projective principle of this thought. It is a cinema- thought.'⁴⁵ Cinema is not only a kind of art, or a region of aesthetics. Even the universe is a 'metacinema'.

Kinesiological philosophy: Scotus and Kant

If the universe can be described as cinematic, it is because 'kinesiological' questions concerning time, movement and the interval that

connects them form the most basic infrastructure of our metaphysics, cosmology and political thought. What is at stake here, then, is not only the structure of the film image, but the opportunity to think the history of thought as a problem of means, meditation and intervals. In a following section, we turn our attention more fully to the ways in which Deleuze develops a Bergsonian history of the evolutions of shots and planes in the film image. Before we do so, though, it will help to situate Deleuze's 'kinesiological' philosophy a little more fully in the history of thought. I would like to identify and briefly reflect on two important moments in the genealogy of cinema or kinesis where the metaphysics of the medium, as we might call it, takes on a whole new productive power and opens up new directions in thought that are reclaimed by Deleuze and Bergson, among others. The first of these moments is the theory of virtuality and self-movement in the early modern theology of Duns Scotus. The second is the discussion of self-affection as a kind of movement in Kant, specifically in Kant's new image of reason as a moving interval between being and thinking. A few words on these philosophical ancestors of cinema can help to provide a much-needed context for understanding what is meant by 'the reversal of time and movement', and how it helps us appreciate the composition of planes and intervals in the evolution of philosophy and art.

Duns Scotus on movement and self-motion

Duns Scotus' theses on self-motion anticipate many of the central concerns of Deleuze's cinema theory. Scotus develops these ideas at a defining moment in early modernity, when Greek philosophy and Christian theology encounter one another and form the so-called onto-theology that Heidegger, Derrida and so many others would try hard to overcome.⁴⁶

Scotus, like Bergson many centuries later, wants to understand the immanent properties of the things themselves that change. This leads him to break down the distinctions between what is an origin and what is a terminus, and what is active and what is passive, and to doubt the principle of formal resemblance that his immediate precursor Thomas Aquinas had borrowed from Aristotle. This is not to say that Scotus rejects theology, but that his theological impulses are directed at the more immanent problem of the nature of change itself. Scotus does not want to deny God's power, but to show that he may be so complex and virtuous that he can create beings that differ in kind from him, and

are in turn capable of producing life forms different than themselves. Scotus recognizes that change need not require resemblance, or at the very least, that it requires much more than resemblance. These investigations lead him to recognize the generative power of intervals – how change happens and where it happens. In these ways, Scotus makes possible the central concerns of Bergsonism and the cinema theory that Deleuze develops out of it.

Omne Quod Movetur Ab Alio Movetur: ‘Everything moved is moved by another thing’: Aristotle’s kinesiological principle comes into medieval thought by way of Thomas Aquinas. The principle states that movement requires a mover which is in act, and contains a perfection (or terminal point) and a moved thing which is passive and lacks the perfection which it must wait to receive in order to accomplish its movement. Creatures cannot generate movement from their own intrinsic immanent properties because (i) all movement must be divided into active and passive parts and; (ii) no being can be simultaneously active and passive with respect to a given end, since that would require that it both lack and possess something at the same time.

Aquinas explains:

Now anything in process of change is being changed by something else. This is so because it is characteristic of things in process of change that they do not yet have the perfection towards which they move, though able to have it; whereas it is characteristic of something causing change to have that perfection already.... A thing in process of change cannot actually cause that change, it cannot change itself of necessity, therefore anything in process of change is being changed by something else. Moreover, this something else, if in process of change, is itself being changed by yet another thing; and this last by another.... Hence one is bound to arrive at some first cause of change not itself being changed by anything, and this is what everyone understands by God.⁴⁷

Aquinas follows Aristotle in separating the *tertium a quo* (the beginning of motion) from the *tertium ad quom* (the final aim of motion) and assigning to them active and passive functions. The mover is active and contains the principle or cause of change. The moved thing is passive and lacks the perfection which will define it as the terminal point of motion. It is this separation of active and passive moments, and the principle of resemblance that joins them, which Scotus places in question. Scotus sets out to show that God’s creatures may be capable of

moving themselves. To pursue that thought, he asks what happens in the interval between the beginning and the final aim of movement.

Scotus deconstructs the Aristotelian principle by distinguishing first, among different kinds of causal agents, and then among the different ways in which these agents can contain their perfections. Both of these distinctions (of kinds of agency and modes of possession) converge in the central concept of 'virtual act'.

For Aristotle, self-motion is impossible because agent and patient are clearly distinct. One lacks the perfection which the other possesses. So, in order to move itself, an agent would have to possess and lack the same effect. But, as Scotus shows, while all agents possess effects, we can nevertheless distinguish among different kinds of agents that produce effects that can be like or unlike themselves. In the language of scholasticism, causes may be univocal or equivocal in their effects. When agent and patient share the same form, we say that the agent is a univocal agent. 'Univocal' here means that its effect is of the same nature and form as the agent. A univocal agent is one which communicates its own form to a patient which lacks that form, as when a man begets a man. The idea of genus in Greek thought follows from this model. A genus is defined by its ability to generate the same thing. Thus, a horse always produces more horses. In the case of a univocal agent, movement involves a mutual exclusivity of agent and patient, and a formal resemblance between them.

An equivocal agent, on the other hand, is not governed by the same rule of resemblance. The equivocal cause does not possess the form to which it gives rise. What it possesses is the *virtus*, or power to create a form. To possess the *virtus*, the agent need not formally resemble the effect it is capable of creating. In other words, it is able to produce effects that are different in nature and kind from itself.

Medieval thinkers commonly applied the distinction between formal and virtual possession of a terminal effect to both divine and worldly causes. Aquinas, for example, taught that God does not formally resemble the creatures he creates. God has the ability to create bodies without these bodies formally resembling him. Thus, God possesses our bodies in a 'virtual' way. The sun has a similar relation to the effects it causes. The sun itself is not hot (because heat was thought to be a property of corruptible bodies, which the sun is not), but it produces heat. Like God, the sun is also outside the species of its effects, i.e., it is not of the same form as its effects. Heat, therefore, is in virtual actuality in the formally cold properties of the sun. Or, still more interesting, the sun, through the process of putrefaction, causes maggots to form. Does the

sun then have the form of a maggot? No. It possess the virtual power to give rise to maggots without actually possessing this form. Heat and maggots are in virtual actuality in the formal actuality of the sun.⁴⁸

Henry of Ghent used this sense of virtuality to understand the relation of a subject to the cause of its accidents. The subject does not possess its accidental quality formally, or actually. For it is in the very nature of an accident that we do not possess it beforehand. The 'accidental' subject possesses the form of its accident 'virtually'. The Scotus scholar Allan Wolter explains that an object, too, may be said to virtually contain a notion 'if the object has the power or *virtus* of producing the notion in the mind'. A spherical object, for example, may be thought to contain the notion of a circle, even though it is not itself circular. Virtuality, in the sense that we use it today to speak of virtual images, or virtual reality can be best understood in this medieval sense. Virtuality does not mean that something is a copy, or a weak version. That still limits virtuality to being nothing more than a weak form of the possible. A computer program that simulates architectural designs virtually contains a house, which means that it possesses the ability to evoke the image of a house on the screen, or in the mind, but does not actually have the form of a house. In a similar way, pluripotent stem cells taken from the skin can generate cells of muscles or bones.

According to the kinesiological principle, self-motion is impossible because it would require that a thing be simultaneously in act and in potency to act. Why does Scotus challenge this principle? Because nothing prevents an equivocal agent from being affected by the form that its virtual quality evokes. If an agent can give rise to a form different from itself, then it may be possible for it to be subsequently acted upon by that other, now distinct form. In such a case, mover and moved are not distinct. The mover is itself changed by the form to which it gives rise, as though it were the 'effect of its own secretion', to borrow a fitting image from Deleuze.⁴⁹

It is conceivable then that one and the same thing might be in virtual act with respect to one perfection (i.e., possessing the capacity to create a different form) and, in formal potency to it (able to receive, to be acted upon by the perfection). In such a case, the active agent is not distinct from the passive recipient of motion. This is not true of all equivocal agents. God is not transformed by the perfections he possesses, even though he may contain them in a virtual way. But it is true of some, and Scotus ultimately wants to show that it is possible that God could create beings that are themselves capable of self-motion. Scotus will claim that this is true of many things. Many of his

examples – the movement of heavy bodies and the local motion of animals – are understandable only in the light of obscure debates in medieval physics. More intelligible to us today might be his comments on the will. The will is a power to create acts of volition, but it possesses this power without possessing the actual form of the acts it brings about. And, since the agent who possesses the will is changed by the acts of volition to which the will gives rise, it is affected and moved by the acts it brings into being.⁵⁰

What matters in this now distant and obscure logic is that we see here the first significant crack in the Greek principle of resemblance that then allows a whole new importance to be given to the interval where active and passive, origin and terminus communicate. Scotus, we might say, is our first media theorist, who aims his sights on the metaphysics of the medium.

Kant: the movement of self-affection

Kant then intensifies this principle, and though he does not root his philosophy in Scotus' ideas, he nevertheless repeats and pursues the same concerns: the separation of the active and the passive, and the break with a principle of resemblance. Kant locates the work of reason in a productive, generative interval where a subject affects itself. He does not arrive at a concept of virtuality, exactly, but rather of 'determinability' – the capacity of a thing to be directed to different ends. This is why Deleuze says that Kant 'reverses time and movement' and gives us a pure and empty form of time.

No matter how static the Kantian architectonic might seem, movement was always its central concern. Kant likened himself to Copernicus because he discovered in reason what Copernicus had discovered in the heavens, namely that we participate in the movement we experience. Kant's highest principle of synthetic judgment says that the object we experience, and our experience of the object emerge in one and the same movement of reason. This Kantian principle, which initiates philosophical modernity, and reflexivity in the human sciences, supposes a wider kinesiological change, indeed a reversal, in the value we assign to time and movement. With Kant, the subject participates in the determination of the objects of experience. As a result, mind is no longer a conduit between being and phenomena, or essence and existence. Instead, it becomes the site of an active ability to determine experience. Reason is determinability, 'the precise moment when the indeterminate maintains its essential relation with the determinate thing.'⁵¹

The problem of self-affection, which Kant raises in the First Critique, eats away at the distinction of actual vs. potential, and active vs. passive moments of experience. It exposes a crack in the subject of modern philosophy which Kant is careful to locate in the interval between and appearance.

Kant points out that the Cartesian proof of existence (*Cogito ergo sum*) fails to explain precisely how indeterminate being (what I am) becomes determinate, and thus capable of appearing in a phenomenal form (as what I think, what appears to me in thought). Descartes skips over the interval between the two moments of being and thinking and supposes a kind of resemblance between them. In his criticisms of Descartes, Kant makes the interval between being and experience the center of reason. In this way, he changes the relation of time and movement.

Kant argues that thinking cannot bear directly on a pure being, since being, in order to be an object of thought, must take the form of a phenomena.⁵² 'I think' always means that I am thinking something in particular: I think that it is going to snow, or that I understand a dream from last night. It is only as I receive this memory, or experience this perception that I can know that I am. But how does the indeterminate being that 'I am' actively present itself in the particular, determined phenomena that 'I think'? Kant questions the form under which the indeterminate moment may become determinate. The determination 'I think' appears to refer immediately to the indeterminate existence 'I am'. But it is clear that the process requires some principle of connectivity that allows the one to take the form of another. In other words, self-affection requires a form or mechanism of determinability. Without such a mechanism, or means of production, the *cogito* remains only 'the possibility of thinking'.⁵³

Descartes attributes to the *cogito* both being and its sensible appearance. And yet, his formulation of the *cogito* rests on an irreducible difference between being and thinking. The self experiences its own being as an other that affects it. Deleuze explains: 'I am therefore determined as a passive self that necessarily represents its own thinking activity to itself as an Other (Autre) that affects it'.⁵⁴ The form of self-affection in which the *cogito* acts on itself, is a difference, or an interval. The difference is not simply between two things. For being and thinking are part of the same whole of reason. It is a difference internal to the structure of thought, which produces something – in this case, self-awareness, or self-affection. The interval between being and phenomena is a difference that distributes itself throughout the self, and on the basis of which the self thinks and produces any movement between I and ego, or concept and object. In other words, it is a difference that differentiates.

Let us see now how the Bergsonian themes of time and movement we have been following are implicated in this problem of self-affection. When Kant raises the problem of determinability, he places in doubt the model of movement and time that underlies the classical image of thought. If thinking simply derives from being (*Cogito ergo sum*), then the interval between them is subordinated to a preformed resemblance. Kant's point is that the interval between the indeterminate possibility of thinking and its concrete determination as phenomena is not an obstacle in the way of actualization. It is the condition of the possibility of any distinction between being and phenomena. The interval – the form of determinability – is productive. As a result, indeterminate being is determinable only in time. I am 'determines the existence of a self [moi] that changes in time and presents a certain degree of consciousness at every moment.'⁵⁵ Time is the form by which the mind affects itself. It is the form of differentiation on the basis of which it is possible to construct any movement of resemblance and actualization among being and thought, I and ego, or concept and object. This time may be described as an 'empty and pure form' because it is not in the service of any given movement. It is a generalized principle of differentiation. Time – the form of determinability – is the formal relation by which the mind affects itself. It is 'a machine that turns the indeterminate into a determinate phenomenon'.⁵⁶ Time is a principle of internal difference, and it is 'in this difference that movement is produced as an effect'.⁵⁷ Instead of a resemblance among being and phenomena, plus an interval of time it takes to realize it, Kant gives us a self-affecting subject which produces movement, and can give rise to new and different 'terminal effects', as the Medievals would say. Kant's solution to the problem of determination 'opens being directly onto difference'.⁵⁸ It introduces a 'schizophrenia in principle', a 'crack' in the self, which remains at the heart of modern thought.⁵⁹

What is at stake here, then, is the generative, productive capacity of time's interval, the very thing that Bergson set out after in his critique of scientific time. To get into it requires that we find some way of breaking with the principle of resemblance and of locating the force of movement neither in the origin, not the terminus, but in the middle ground between them.

Radical finalism

In *Creative Evolution*, Bergson's distinguishes between two ways in which philosophy has tried to contain the productive, transformative potency

of the middle that Scotus and Kant were discovering. One is the ancient method which he calls 'radical mechanism'. It gives us a sense of time as already complete and reflected in an image of eternity. On this view, time is a whole of reality, but it is one that is given in advance of the actualization of events that occur within it. The second appears in the new immanent logic of the science of Galileo and Kepler. It rejects the Greek and Christian images of a single complete totality and directs our attention instead to the great diversity of things – empirical sensations, blocks of time, units of space. No totality precedes these. They can be arranged in different structures and directed to different ends. There is only the immanence of this world. The only whole is the one we assemble, after a diversity of elements has presented itself.

Bergson's calls this second method of neutralizing time 'radical finalism'. It anticipates a whole that will come to completion in a future moment. It regards actualization as a movement from less to more, from the weak to the potent, from partial to full actuality. Deleuze says that finalism dreams less of acting than of foreseeing and of allowing free rein to the action which goes from the unpredictable to the predictable. In order to complete its movements, it must minimize the difference between origin and terminus. In either case, it relies on an image of completion in either an *arche* or a *telos*, and regards time as negation and obstacle.

Bergson writes:

As in the mechanistic hypothesis, here again it is supposed that all is given. Finalism thus understood is only inverted mechanism. It springs from the same postulate, with this sole difference, that in the movement of our finite intellects along successive things, whose successiveness is reduced to a mere appearance, it holds in front of us the light with which it claims to guide us, instead of putting it behind. It substitutes the attraction of the future for the impulsion of the past. But succession remains none the less a mere appearance, as indeed does movement itself.⁶⁰

In other words, science replaces the Greek image of ideal unities with a new image of totality as an assembled set. The problem, though, is that it still retains the image of the whole as an accomplished fact. Science, we might say, does not recognize what it has accomplished. The breakup of the ancient image of the whole requires an equally profound change in our conception of novelty. To explain movement without reference to any external, otherworldly cause requires an understanding of time

as not only a measure of a pre-given motion, but also a generative force of invention and differentiation.

Everything depends, then, on how we conceive of movements and sets. How does a set – a diversity of elements – change over time? Science divides up movements into ‘any-moments-whatever’. An instant, separated out in this way, is an immobilized fragment of a movement. It is an empty homogenous moment in a long line of such moments. But the movement in which any-moment participates is, in turn, a mobile section of duration. So, each change in the organization of the instants produces a change in the duration of the whole of which they are part.

‘When Achilles overtakes the tortoise, what changes is the state of the whole which encompassed the tortoise, Achilles and the distance between the two.’⁶¹ In other words, movement is not only the change of parts in a space but the alternation of a medium in which they operate. In the uplifting progression of a melody, or the annoying sound of a dripping tap, the separate elements are not simply added to a common space, the whole of which they form a part changes, too.

What this suggests is that the duration in which change occurs is not a pre-existing *arche* formed in the past, nor a *telos* to be arrived at in the future. It is the medium in which these kinds of time operate. It is a principle of openness. It is addition. It is seriality. This is why Deleuze says that, for Bergson, the whole is the open, and is, in the end, relation. Relations are external to the things they connect. They exist only to the extent that they are connecting. Or, another way of saying this is that a fully accomplished connection is no longer a relation, or a difference. It has become a thing, a *relata* – a completed fact. We can only talk of relations when there is some relating to do, some yet to be completed connection – the open.

So, while immobile sections, or ‘any-instants’ divide up movement, that movement is in turn a section of an enduring whole that is opening and changing. Deleuze summarizes the point in this way: ‘each time we find ourselves confronted with a duration, or in a duration, we may conclude that there exists somewhere a whole which is changing, and which is open somewhere.’⁶²

Difference and diversity

To get at the distinctive reality of this intervallic, open whole, or ‘third world’ as Michel Serres will call it, Deleuze works up a distinction between difference and diversity. Difference is not diversity, he writes. If we call diversity what is given – what appears as a set of distinct elements or

instants to be arranged in a given pattern – then difference is the means by which that set of things can co-exist and act together. Difference is how the given is given. Difference is not a third thing, but the implication of things in one another. Before we can establish diachronic and formal relations among a set of elements, there must be some mechanism of association in which they can co-exist and be co-implicated.

Diversity, then, must attempt to ride above difference and subordinate its powers of aberration to a logic of resemblance. This is necessary because the relation between an origin and terminus is never simply equal. As Bergson reminds us, the movement from a T1 to a T2 supposes an unequal, asymmetrical relation that generates a difference. Why unequal? Because each time a diversity is ordered in some way, and its elements enter into relation, the whole in which those parts participate changes. The parts enter into relation. They form a unity and can be assigned value and significance because they participate in a whole. The whole, however, because it has no existence apart from the arrangement of its elements, is distributed throughout them. So, as objects change their relative positions, the whole of which they form a part is transformed and changes qualitatively. Movement among the parts therefore expresses a qualitative change in the duration of the whole. This kind of qualitative change is possible because the whole that is changing is neither given nor giveable. What is between the parts is not an extensive quantity separating two points, but an unequal asymmetrical relation. When we add two elements to produce a third, it is always with the aim of producing some effect that neither possesses. The synthesis of the third is an interpenetrating and qualitative change that alters the nature and structure of the whole.

In order to establish logical, causal and diachronic relations among a set of elements, we have to guide them through a ‘time of equalization’ that cancels this difference in which elements overlap. Diversity – the arrangement of a set of elements – must render differences uniform and clean, so that the medium in which they transpire disappears. The attempt to erase, or at the very least still difference is never fully successful, because the world is always greater than the patterns we impose on it. The world is the remainder, Deleuze writes, the ineradicable leftover that is there after we have established our equations and calculations:

The world ‘happens’ while God calculates; if the calculations were exact, there would be no world. The world can be regarded as a remainder...⁶³

In a later chapter, we will have reason to consider how very close Deleuze is here to Michel Serres' idea that a medium generates effects that we recognize as noise in a communication circuit. In the meantime, let us turn our attention to the ways and means through which Deleuze tries to bring the noise of the medium to light. How do we describe that being of difference without relying on a sense of a-priorism or finalism, radical mechanism or radical finalism? Can we describe the middle and think the difference that makes diversity possible? In *Difference and Repetition*, Deleuze turns to a language of depth to describe the quality, dimensionality and intensity of the interval's difference:

Oppositions are always planar; they express on a given plane only the distorted effects of an original depth.⁶⁴

In the *Phenomenology of Perception*, Merleau-Ponty describes depth as 'the most existential of all the dimensions'.⁶⁵ Depth is the order of complication, or being together that precedes whatever causal, spatial or diachronic relations we might establish among a set of elements. We can only recognize a set of ordered differences between points if they are first held together in some primordial synthesis. I can only establish relations of the near and the far, or determine whether a figure on the horizon is larger or smaller if I can hold the two together and then create some logical or spatial relation between them. In other words, I can only recognize empirical and diachronic resemblance because a set of elements have first been implicated in one another. It is because they have first been synthesized in this way that a group of elements can be distinguished, and empirical and quantitative relations constructed among them. In Deleuze, we find a similar set of concerns. A diversity is organized into a set of stable relations of cause and effect, before and after, or greater or lesser. This order of what he calls 'extensive quantity' can have a force and effect only because some principle of transformation is at work allowing an origin, a terminus and the difference between them to hold together in some primordial activity of synthesis. 'Oppositions are always planar', Deleuze writes.⁶⁶ But, like a perspective painting, oppositions suppose a prior activity of synthesis that allow the planes to be together, to implicate and have depth. Depth only flares up for a brief moment in Deleuze's discussion of asymmetrical synthesis. However, as is well known, it plays a more central role in the Cinema books, where he develops Andre Bazin's theories on deep focus into a way of understanding 'the reversal of time and movement'.

Reading the remarks on depth in *Difference and Repetition* alongside the theses on deep focus in the *Cinema books*, leads us to an important historical and even evolutionary insight about the coming into being of a new modern image of thought as an 'open whole'. What we find is that deep focus realizes the significance of montage in the same way that, in a much earlier moment, the baroque fold realized the significance of perspectival composition, and the Kantian idea brought into focus the significance of Humean empiricism. In each case, we can trace the evolution from a principle of undivided unity, to an embrace of diversity to finally, a concern with the mechanism of association, or what Deleuze will call simply 'difference'.

Apart from illuminating the Bergsonian themes of mediation and inbetweenness, following the aesthetic and philosophical significance of depth also helps us distinguish the image of modernity we find in Bergsonism from the themes of flatness and fragmentation that have dominated cultural theory in recent years. Bergson's effort to give science the metaphysics it requires leads us to an image of modernity as depth, implication and complexity.

What we shall do here in the next several chapters, then, is first to try to see what the evolution of the plane in the history of the film image teaches us about the productive nature of intervals and connections. We will then follow this idea of the generative medium in two different directions: back to McLuhan and his interest in flatness and depth as figures for understanding the emergence of new media forms, and from there on to Michel Serres' work on the noise of the productive medium.

2

One or Many Planes: The Composition of Intervals in Painting and Film

Readers of André Bazin and Jean Mitry may recognize in Gilles Deleuze's *Cinema* books a reworking of their already well-established theories on the impression of reality in long sequence and deep-focus shots. For Bazin and Mitry, the deep-focus shot represented a leap beyond the analytic fragmentation of action that characterized earlier forms of montage. Deep focus allowed for a more realistic presentation of events as they occurred. Mitry described this as a change from 'actualization' to 'presentification'. In the classical forms of montage that precede Orson Welles 'we participate in a represented past, rather than a present actuality...what we are viewing is the consequence of an action.'¹ In the deep-focus shot, on the other hand, we witness the development of action and the open time in which this takes place. Bazin's argument rested on a belief in film's direct photographic/indexical relation to reality, which he understood to be a part of a movement toward a more perfect analogical presentation of the world in a 'total cinema'.

Deleuze's relation to Bazin is complex. He builds on Bazin's evolution of film language, but directs it toward a very different, Bergsonian end. It is well known that when he reads philosophical texts, such as those of Kant, Spinoza or Bergson, Deleuze does not simply offer commentary or exegesis. He has compared his readings to acts of buggery, or Immaculate Conception, 'approaching an author from behind and giving him a child that would indeed be his but would nonetheless be monstrous'.² He does not simply follow another thinker, but occupies their ideas and transforms them into some new kind of assemblage. It is less often recognized that Deleuze uses a similar strategy in his *Cinema* books. Many of Deleuze's stunning readings of cinematic images are, in fact, reworkings of well-known debates in cinema theory from which he extracts new 'monstrous' concepts whose grasp extends far beyond

film and aesthetics. His reading of the deep-focus shot is an excellent example of this strategy.

Deleuze uses Bergson's critique of the scientific dissection of time to understand how planes and intervals have been organized in modern painting and film. More specifically, he shows us how deep-focus cinematography broke away from the flat, cell-like structure of early montage for the same reasons that, hundreds of years earlier, baroque artists concerned with shadow and recession broke away from the linear biases of Renaissance perspective. These two aesthetic movements, separated by centuries, are nonetheless united by the same desire to unleash the power of intervals and relations that mechanical forms of composition supposed but did not yet articulate. Modern aesthetics, science and philosophy all find their way back to Bergsonian problems of kinesis, that is to say, of movement, time and intervals. Modernity is born in a cinematic tension between the two organizational logics that Mitry calls 'presentification' and 'actualization': the recomposition of unity from a set of discrete, accomplished units, or the unfolding of a present actuality. The primordial battle between these two basic kinetic structures unites a number of otherwise distinct developments in painting, photography, film and philosophy.

Photoplays, montage, deep focus

We begin, then, with the philosophical concept of depth, the monstrous child of Deleuze and Bazin. Bazin was a 'realist' who situated Orson Welles' deep images in a much longer history of representation that stretched back to the Renaissance discovery of perspective. Bazin believed that painting, photography and the various moments of film history are all defined by a movement toward a more perfect correspondence between the image and the reality it represents. The automated, machinic nature of the photograph was a critical leap forward in this movement, and the deep-focus shot its next significant stage. Where photography gave us unequivocal evidence of the world in a mould made from the objects' reflected light, the deep-focus shot brought us still closer because it presented the 'moulding' of the thing in time, or 'an imprint of the duration of the object'.³ On this view, the history of film revealed a certain logical and dialectical progression in our representations of reality.

The earliest cinema of the so-called actualities give us a single, undifferentiated plane of activity. The film is simply a transcription of whatever occurred in front of the camera. There is very little attempt to

organize the plane into complex relations. The shot is composed of a single sequence of action that is not analytically decomposed in any way. Thus, in the Lumiere brothers' film of workers at the factory gate, or the train arriving at the station in Lyon, we are given a single static shot. There is no use of close-up, for instance, to break in on any of the conversations taking place, or to single out the shuffle of feet as we might see in any contemporary film. There may well be cuts between these shots, but when they occur they only serve to link 'whole spaces' and not yet to break action into closer views.

For Deleuze, the compositional art of the cinema takes an evolutionary leap forward when filmmakers begin to employ analytical editing to break scenes into component pieces and rearrange them into logical sequences. This involved a whole different form of presentation. For it was now possible to decide what in a particular shot should be emphasized in terms of the space (what elements or details matter) and time (for how long we should look). After seeing a sequence of these selected shots, we draw inferences about what we have witnessed. In Dreyer's *Joan of Arc*, for example, we see a shot of the judge, a shot of Joan, a grave being dug, and then the council of judges. We are left to infer that the council will judge against Joan, who will then be buried in the grave we saw earlier. What is important for our purposes is that the film provides this information through a serial presentation of single, shallow-focus shots, or planes. The whole of the idea conveyed is something we assemble after the fact. This is the basic structure of the classic Hollywood cinema of the 1930s. The well-known Hollywood two-shot, or shot-counter-shot, displays a series of simple, flat images. Often we are presented with an establishing shot, followed by a series of close shots that break down the action into component pieces.

Early cinema, then, oscillates between two basic structures: It presents either a single undifferentiated plane, or a series of single planes given in succession. To these different forms, there correspond two different types of synthesis, which, in turn, present two different kinds of 'wholes'. In the early actualities, the whole is given in advance of its presentation. The camera simply records an already existing situation. In analytical montage, the whole is given as a sum that we piece together after the presentation of a sequence. In each case, a whole, or an idea, is presented. In neither of these cases, though, is the whole immanent to the image being presented on screen. It is either given before, as a full reality to be captured, or afterwards, when a sequence has completed itself, and an idea may be inferred from it. And in either case, the single plane

remains the basic compositional element of a whole that is conceived of as either as an arche or a telos working in the service of what Deleuze calls a cinema of the 'one'.

With this in mind, we can best appreciate the significance of *Citizen Kane*. Welles overcomes classical cinema's dualism of one or many planes when he creates a shot composed of a set of striated planes all presented at once. What is remarkable about the shot is its new method of compositing and presenting a whole. The use of shadow and light, and the presence of the visible ceiling and floors give us a whole space in which complex actions transpire. The viewer is invited to roam across the multiple planes and to make inferences about the details as the scene unfolds.

The value of deep focus does not (only) lie in its capacity to represent the 'extra-cinematic' world more accurately, as Andre Bazin and others had supposed. For Deleuze, Welles' cinema of relations 'arouses the thinker in us' and reveals a new vocation for film: not to provide evidence that the world exists, but to produce an image of our powers of thought. After Welles, 'The cinema must film not the world, but our belief in the world'.⁴

Deep focus: relations inside the shot

Welles overcomes early cinema's dialectic of one or many planes when he reproduces the principle of montage – cutting up action into different planes – inside the shot. The result was something that consisted neither of a single plane, nor a series of single planes unfolded in succession. Instead, complex planar relations inside the shot now took on a more active role in the creation of whatever transpired on screen. Thus, 'Relations of thought in the image (have) replaced the contiguity of relations of images (shot-reverse-shot)'.⁵

The best example of this new type of shot is the now-famous deep focus one in which Kane bursts into his girlfriend's bedroom to discover her unconscious from an attempted suicidal overdose of pills. In an extreme deep-focus shot, we see Kane, a tiny figure in the background entering the room. In the middle ground, Susan lies catatonic in her bed, and filling almost a third of the frame in the foreground is a drinking glass and a pill bottle, the evidence of her suicide attempt.

If it had been shot with shallow focus, analytical editing, the scene would have been broken into a series of separate shots from which we would subsequently have to infer a meaning. David Bordwell describes how it might have looked:

A 1930s *decoupage* director would have cut from Kane outside Susan's room, banging on the door, to Susan gasping in bed, and then to the glass and bottle. This string of shots would allow us to infer that she has taken an overdose of medicine. But Welles jams all the elements into a single frame.⁶

The opposition of a montage of separate spaces, analytically decomposed into a series of images, is here overcome in a dialectical leap forward which incorporates both the style of a single plane, and the decomposition of the plane into a series of many foreshortened ones. Deleuze explains that 'It is the method of between two-images which does away with the cinema of the One'.⁷ What we get is a new kind of image based on relations inside the shot. The history of the shot progresses from one (the early actualities) to many (montage) to, finally, a multiplicity (deep-focus shot) that passes beyond the opposition of one or many planes. Equally, it changes from a whole that proceeds, to one that follows, to, finally, a whole that is contemporary with the things it unites.

We are no longer dealing with one single present or a sequence of presents. It is true that *Citizen Kane* makes use of classical forms of montage, which show us short, flat shots detailing the habitual movements of Kane's life – Kane reading the newspaper, at dinner, in a meeting. But deep focus opens up these presents and suspends them from the chronological progression so that they can be explored as 'sheets' or 'regions' of the past in which we can roam around and look for the missing element – Rosebud – which the film seeks in the different slices of Kane's past.

Welles is not the only, and not even the first, filmmaker to make use of depth in a shot. Before him, Jean Renoir had employed it in *Rules of the Game*, where he coupled it with mirrors and reflecting surfaces to open out space and to produce frames within frames. Using wide angles and in-camera double exposures, Welles and Gregg Toland significantly increased depth in new ways to expose ceilings and floors and achieve gigantic dimensions which could be connected to reduced sizes in the background. William Wyler, also working in conjunction with Gregg Toland, used similar techniques in *The Best Years of Our Lives*. In a pivotal bar scene, Uncle Butch teaches Homer Parish, the war amputee, to play piano with his prosthetic hooks, while his soldier pal Al Stephenson looks on. Meanwhile, at the extreme other end of the bar, Fred Derry, their struggling alcoholic war buddy, watches this scene from a phone booth, where he makes the call that ends his illicit affair with Al's daughter Peggy. The complex relations of nearness and distance that make up their new post-war lives and

the non-synchronous layers of time – the eternal present of the bar, Homer's concern about his future as an amputee, and Fred's alcoholic past are all condensed in a single scene. In this way, the complex intricacies and the movement among these relations and tenses can be watched as they fold and unfold in diagonals and bands and strips of light and shadow.

Since Deleuze's reading of cinema sometimes drifts toward an 'auteur' theory of the artist as genius, it is important to keep in mind that the deep-focus shot is complex and multiple in its origins. It was after all, equally the creation of Greg Tolands' innovative cinematography. Tolands' technical alteration of the camera, his use of lens coatings, along with the development of optical printing and in-camera composite images all made the new kind of shot possible.

We should note as well the work of set designers and lighting technicians who created the play of shadows and expansive floor to ceiling space, not to mention the technical progress in new forms of lightning that made it possible to narrow the aperture and increase the depth of the recorded image.

It is possible, of course, to construct other, different histories of the cinema that do not see the simple images of early film as a prelude to the later complex forms. We might pay more attention to the role of the viewer, or the social context of the films' reception. Tom Gunning, for instance, gives us a very different sense of the significance of early cinema, which relates it to the sensation machines of the fairgrounds and other entertainment spectacles.⁸ Bazin's interest in the evolution of sequencing, shot selection and the internal composition, or 'plastics' of the image, are more useful for Deleuze's purposes, though, because they more directly address the relation of time and movement in the cinema and allow him to make connections with similar problems in aesthetics and philosophy. In fact, we might wonder whether Deleuze's cinema theory is, at some deeper level, a reworking or 'buggery' of the Bazinian theme of realism. Manuel De Landa, for example, has stressed the element of dynamic realism in Deleuze.⁹ The referent of realism in the *Cinema* books is not the faithful reproduction of the object in an external reality, but the structure of time and movement, or the 'kinesiology' from which cinema derives its name. The deep-focus shot gives us the first 'time-image', which Deleuze describes as 'a direct presentation of time'.¹⁰ I will not explore Deleuze's theory of time and movement in any more detail here, since we have already touched on it in the previous chapter. Instead, we turn our attention

now to the way that the evolution of the cinematic plane illustrates the difficulty of presenting an image of a whole that, instead of preceding or following the presentation of diversity, is co-emergent with it.

Depth in painting: from planimetric to recessional composition

Cinema is not the first art to use depth of field to break free of the unity of the plane. Deleuze says that 'The question of depth of field already took up in a way a transformation of painting in the seventeenth century' and, he speculates, 'It is possible that Welles' cinema has been able to recreate, for the use of our modern world, a transformation of thought that originally took place in that distant century.'¹¹

When Deleuze compares Welles' deep-focus image to the baroque, he refers us to Heinrich Wölfflin's work on the history of plane and recession in early modern painting. Wölfflin is best known for developing the distinction between tactile and visual forms of seeing. What will interest us here, however, is his lesser-known theory that the history of modern art is defined by a change from an initial emphasis on the plane, in Renaissance perspective, to an increasing emphasis on the relation, or 'recession' between planes, in the baroque period.¹² This not only represents a change from one style to another, but is also the basis for all subsequent abstraction in art that recognizes interval and connection as the central concern of aesthetics.

The central issue here is how we understand the 'metaphysical' significance of perspective. Linear, or mathematical perspective is often identified as a turning point in Western culture when we gained a new mastery over the earth and expressed a desire to detach ourselves from our conditions of existence. Erwin Panofsky liked to remind us that perspective means 'looking through, as in looking through a window, out onto something that is clearly distinct from us'.¹³ Hannah Arendt, Martin Heidegger and a host of others have joined in criticizing the technique that taught us to see the world through a frame. What is less often pointed out, though, is that perspective also made it possible to multiply a number of different aesthetic planes in a work and to have them adhere together into complex wholes. Perspective makes the synthesis of multiple interacting planes a basic defining problem of aesthetics. What does it matter if the work foregrounds the elements that are placed in association, or the activity of association itself? Here

lies the basis for all questions of abstraction, of figure-ground relations and of depth, whether taken in a straightforward cognitive sense, or as a metaphor for the multilayered and complex nature of modern living.

The technique of perspective, as it emerged in the fifteenth century, allowed an artist to multiply the number of planes in a work and unify them with mathematical rules of recession. This created a radically new kind of image, different from the medieval type which was focused on a central, foreground compositional plane, which Erwin Panofsky called 'an unconditionally two-dimensional surface'.¹⁴

The movement from the medieval, single flat plane to the multidimensional perspectival work mirrors the change we followed in film from the early actualities to montage. Wolflinn's thesis, however, allows us to be precise about what this change involves, because he distinguishes between two basic elements of perspective, which he calls 'plane and recession'. He shows that one could produce very different kinds of images, depending on whether the accent was placed on one or the other of these elements.

Initially, in the early Renaissance, perspective is used to create compositional planes that appear distinct and autonomous from one another. The painting is arranged into strata and sequences of discrete events. Each space of action exists first on its own, and only subsequently in relation to the others. This early form of 'planimetric' composition, as Wolflinn called it, multiplied the number of planes, but it did not place in question the unity and self-containedness of the plane. In these first uses, perspective gives us many single planes but does little with the relations of recession that unite them.

We can take as exemplary of an initial 'planimetric' use of perspective a well-known work: Hieronymus Bosch's *Garden of Earthly Delights*. Here, the landscape consists of a series of episodes of carnal transgression. Each of these planes is a separate present moment which can stand on its own and in fact does when, as commonly happens now, the painting is reproduced in detail. These tableaux are nevertheless distinct events, and the overall unity of the work is a cumulative one. We might think of Bosch as a sort of Renaissance equivalent of analytic montage.

The same 'planimetric' structure can be seen in the early Italian Renaissance style of Uccello or Crivelli. In Uccello's *The Battle of San Romano*, it is still possible to determine a foreground plane in which the action is centered. It is true that the background recedes away in depth, but the painting is divided into strips, or bands of light with intervals of land separating them, so that depth and recession work to maintain

the divisions between these planes. In Crivelli's *The Annunciation*, the pronounced geometrical division of columns, walls, windows and doors produces this same analytical division of space.

In Renaissance paintings, depth and recession multiply the number of planes, but they are not yet used to challenge the status of the singular plane that remains what it was in the medieval world – the basic cell of composition. In the evolution from Renaissance to baroque style, however, the value of plane and recession changes. Wolflinn says, 'the beauty of the plane yields to the beauty of recession'.¹⁵ Recession, or the relation between planes, begins to play a positive role in composition. The 'nerve' of the painting now lies in the relation of foreground and background parts. The plane as central focus of the painting is 'depreciated'. The painting is no longer able to unite in the plane.

With Rubens, for example, the interest is less in the composition of the planes, and more in the movement of light across them, which he uses to bring the viewer into the work. This 'into the picture' movement can be achieved in various ways. In *The Elevation of the Cross*, Rubens uses the properties of color to lead the eye across the planes and to avoid presenting any of them in isolation. Rembrandt, on the other hand, uses light to achieve a similar into the picture movement. In *The Blinding of Sampson*, the plane is reduced to a secondary status, and light and color, which unite the planes, are the principle subjects. Much the same can be said about the role of light and chiaroscuro for Caravaggio in, for instance, *The Calling of St. Matthew*. What unites all these baroque examples is that the unity of the plane is replaced by an interest in the co-existence and relation among the planes. Or, to be more precise, the relation takes precedence over the relata. Baroque recession, like the 'irrational interval' of modern cinema, is not simply an inert connective tissue, but a principle of differentiation that plays a positive role in the idea which the image conveys.

Wolflinn explains that, in the baroque use of perspective:

[T]he recessional movement dominates and nothing settles into strips. Roads leading inward, foreshortened avenues happened earlier, but they never dominated the picture. Now it is on just such motives that the accent lays. The recession of forms is the chief thing, not their co-relation from left to right. Concrete objects can even be totally absent, and then the new art really comes into its own, then it is the general depth of the space that the spectator is called upon to apprehend in one breadth as a unified whole.¹⁶

All pictures have recession, but the recession has a different effect, depending on whether we are compelled to organize the space into different planes which we subsequently synthesize, or to experience it as a recessional movement. In the case of Renaissance planimetric composition, our attention is directed to the separate planar components of the work. The relations that link these together merely convey the eye from one distinct plane to another. We could say that the relations are subordinate to the planes, or that they work in the service of the plane. The baroque image, on the other hand, realizes what was already the latent possibility of Renaissance perspective: that the multiplication of planes allows the relation to gain some autonomy from the content of the plane. Recession, or as Deleuze likes to say, 'the interstice' now knows a new unlimited freedom.

In *The Fold*, his book on the Baroque, Deleuze explains, in a way reminiscent of Wolflinn, why Uccello's folds are not 'Baroque'.

Uccello's folds are not really Baroque because they are held in solid, polygonal, inflexible even if ambiguous geometrical structures. Should we wish to maintain the working relation of the Baroque and the fold, we shall therefore have to show that the fold remains limited in the other cases, and that in the Baroque it knows an unlimited freedom whose conditions can be determined. Folds seem to be rid of their supports of cloth, granite, or cloud in order to enter into an infinite convergence.¹⁷

Uccello's Renaissance style is not yet baroque because it still does not break free of the planar geometrical style, and as long as this is the case, the fold remains only a difference between two things, and not yet a principle of differentiation out of which any plane, figuration or content emerges. Like the deep-focus shot at the center of the *Cinema* books, the baroque image does not permit the eye to form either a sequence of distinct planes, or the unity of a single plane.

The opposition of one (the medieval flat panel) and many (the Renaissance multi-plane planimetric panel) is overcome in a new baroque art of relations. The receding depth opens a vista between the main figures in the picture, and the viewer is now compelled to move between the planes, to link up foreground and background and to grasp the meaning of the work in the movement between the planes. Or, as Deleuze says of Welles', 'each image is plucked from the void and falls back into it.'¹⁸ Fold, relation and abstraction become the content of the image. This is 'the contribution of the Baroque to art in general'.¹⁹

Merleau-Ponty on primordial and objectified depth

We can further clarify this relation of foreground, background and interval by drawing a comparison with Merleau-Ponty's distinction of 'primordial' and 'objectified' depth. Merleau-Ponty opposed a phenomenological theory of depth to the 'associationist' image of perception as a 'mobile zone of distinctness'.²⁰ In this latter, common-sensical image of perception, we seem to focus attention on only one image at a time, and thus to view any one of them at the expense of all others. After having taken in a number of such views of the exterior world, so the theory goes, we synthesize them and make inferences based on them, as in empiricism, which I will address more fully in a moment. This simple theory of depth sees it as essentially a matter of empirical distance among distinct entities. Depth is based on the recognition of a distance between things. We first view one thing, and then another. Once we establish the difference in the size of objects in the foreground and background, we then calculate the depth or distance between them. This understanding of depth, which Merleau-Ponty traces to Descartes' *Dioptrics*, corresponds roughly to the kind of organizational form that Wolflinn calls 'planimetric composition'. Here the self-contained plane remains the basic compositional unit, and relations serve to link several of these into an aggregate unity.

The trouble with the simple, Cartesian theory of depth is that it derives the relation of depth from the things it relates. But, as Merleau-Ponty reminds us, I can only isolate a foreground figure because another background one has already provided a context that allows me to consider the two as participating in a whole in which relations can be formed. Figures seen in relative size in the foreground and background of a work can only be judged and compared because I have already regarded them as elements of a totality. Merleau-Ponty's thesis is that the projection of this whole is the condition of any empirical relations we might construct among the parts. There is not first a given difference in size and then a recognition of depth. We do not perceive planes with a given sets of properties that we then relate. It is only because they have first been synthesized in this way that the elements can be distinguished, and empirical and quantitative relations constructed among them. This is why depth is 'the most existential of all the dimensions'.²¹ In depth, elements that are mutually exclusive and belong to different planes nevertheless take as 'profiles of one and the same phenomenon'. Depth is the dimension in which

‘things or elements envelop each other’. It is ‘the contraction into one perceptual act of a whole possible process’.²²

We might debate whether or what point Merleau-Ponty’s phenomenological analysis of depth must part ways with the Deleuzian one, but what matters here is that we highlight this ambivalence wherein depth can signal either an associationist connection among discrete parts, experienced ‘*partes extra partes*’, or an open whole or ‘folding’ in which an array of sensations are co-implicated.

It is in this latter possibility that both Wolflinn and Deleuze find the basis of all subsequent abstraction in art. Even when depth ceases to be central to visual art, as Clement Greenberg has said of twentieth-century painting, and when painting consists of ‘blocs of sensation’, as Deleuze has suggested, these aesthetic developments find their origin in the baroque’s break with figuration and content.²³ In both cinema and painting, the break with the plane represents a Copernican turn where thought and image move away from the problem of representation, toward an analysis of the conditions of any presentation at all.

Now, let us see now how these insights from the aesthetics of film and painting help us understand the development of the image of thought in philosophy.

Empiricism as planimetric composition

In philosophy, Hume’s empiricism directs thinking to the immanence of thought. And as in painting and film, it initially appears in the partial and incomplete form of ‘the many’. Hume shows that human nature participates in the creation of what it experiences, and in doing so he overturns the Platonic image of thought as a ‘reminiscence’ of already existing connections and correspondences in the external world. There is no external, transcendent One that thought represents or remembers. It is human nature that allows us to infer relations, to create beliefs and posit rules, and so to produce sequences of experience.

In his book on Hume, Deleuze corrects the mistaken image of empiricism as the derivation of knowledge from experience.²⁴ What matters in empiricism is that it is an activity internal to the mind. For Hume, the movement of the mind organizing a diversity of sense impressions creates experience. When I say, ‘because’, ‘always’, ‘necessarily’, or ‘as a result’, I am not pointing to any real or pre-existing connections in the world. I am actively organizing the elements of experience into a form that, until now, they had not known. Empiricism describes the mind’s movement through a sequence of impressions. It is the cognitive

equivalent of analytical editing and planimetric composition. The empiricist mind abandons the central representation of God or nature, to range over strips, bands and lines of impressions.

Hume's new image of thought as a creative motion internal to thought raises the same difficult Bergsonian questions concerning the organization of diversity and 'the One' that we encountered earlier in aesthetics. It displaces the unity of God with a new image of the mind as a play of impressions from which connections are inferred.

Shelling identified the shortcoming of Hume's efforts to break with theology when he said that Hume supposes that there is first a time when we do not judge experience according to laws of association and causality, as though we first experience impressions in the raw, and then infer relations from them.²⁵ The problem here is the same one that Merleau-Ponty identified with associationism. Before we ever subject our impressions to principles of association, we have to first contract them into a sequence. We have to provide a manifold or whole – even if it is entirely projective or fictitious – with which we can hold together a set of impressions in order to derive order from them.

Kant provides a new image of this kind of whole in which diversity can appear. He does for empiricism what deep focus does for montage. Kant does not deny that thought is made of a diversity of sensations. Nor does he want to return to a theological vision of unity. When Kant asks about the conditions under which a manifold of immanent sensations can be thought, he is not dismissing empiricism but, rather, deepening and extending the principle of immanence introduced by Hume. Until Kant, the image of thought is divided between the one of God and the many of Hume's simple empiricism. In the same way that Welles moves montage inside the shot, Kant moves the empiricist array of impressions inside a new image of the whole of reason.

Kant does for empiricism what deep focus does for montage

In his reading of Kant, Deleuze shows that the new image of the whole that Kant introduces is not any kind of theological relic. It is not an image outside thought, but the image that thought presents to itself of itself. The whole which finite intuition requires is immanent to thought. It does not precede thinking as it might in rational theology, and it is not simply a sum of parts that follows the experience of events, as in Hume's 'simple' empiricism. Paraphrasing Deleuze's comments on Bergson's concept of the whole, we could say that Kant's new image of

the whole is not a closed set of concepts, but that by virtue of which each set of concepts remains open.

Kant's name for the new image of thought is 'Transcendental Idea'. The idea in the Kantian system is a name for the whole that is implicit in each of our conceptual judgments. It is by virtue of the presence of the whole that we can regard any given phenomena as a part of a system that ensures its truth-value. It is the Idea, for example, that allows reason to create syllogisms where one concept (man) implies, or is implicated in, another (mortal). The Idea allows the concepts produced by the understanding to co-implicate, or to be together and take as profiles of one and the same phenomena. Without this kind of projected whole, thinking would only amount to the application of isolated concepts – this is an x, that is a y.

In a striking passage of the first critique, Kant himself describes the Idea – the mind's own image of the whole of reason – in a way that reminds us of a deep-focus image. He calls the idea a 'focus imaginarius', and he likens it to the fictitious space which we must imagine to lie behind a mirror in order that, upon looking into it, we are able to see not only the objects which lie before us (the sink, our hands washing themselves), but also those at a distance behind our backs. Here is what he says:

I accordingly maintain that Transcendental Ideas never allow of any constitutive employment. When regarded in that mistaken manner, and therefore as supplying concepts of certain objects, they are but pseudo-rational, merely dialectical concepts. On the other hand, they have an excellent, and indeed indispensably necessary, regulative employment, namely that of directing the understanding towards a certain goal upon which the routes marked out by all its rules converge, as upon their point of intersection. This point is indeed a mere idea, a focus imaginarius, from which, since it lies quite outside experience, the concepts of the understanding do not in reality proceed; none the less it serves to give to these concepts the greatest [possible] extension. Hence arises the illusion that the lines have their source in a real object lying outside the field of empirically possible knowledge just as objects reflected in a mirror are seen as behind it. Nevertheless this illusion (which need not, however, be allowed to deceive us) is indispensably necessary if we are to direct the understanding beyond every given experience (as part of the sum of possible experience) and thereby to secure its greatest possible extension, just as in the case of the mirror-vision, the illusion involved is indispensably necessary if,

besides the objects which lie before our eyes, we are also able to see those which lie at a distance behind our back.²⁶

The mirror illusion allows us to synthesize different elements and planes of experience into a whole. It functions, in relation to the concepts, in the same way that a vanishing point does with respect to the different planes of a work of art. It transforms the flat, two-dimensional relation of concept and object into a three-dimensional plane with depth.

Earlier we saw that in the baroque, 'the beauty of the plane is replaced by the beauty of recession'. When this occurs, 'it is the general depth of the space that the spectator is called upon to apprehend in one breadth as a unified whole.'²⁷ Can we say that Kant introduces a recessional type in philosophy, since he directs our attention away from specific impressions and concepts to the kind of whole necessary to unite them and experience them together, at once?

Kant wants to give empiricism the kind of whole it requires. But in doing so, he oversteps the mark, as it were, and returns to an image of unity that is given prior to, and even independently of, the movement of determination. Somewhere between Hume and Kant – at a precise moment within Kantianism itself, at 'a furtive, explosive moment... which is not even continued by Kant'²⁸ – the whole is strictly contemporary with the elements it organizes, and is for that reason open and temporal.

Flatness and depth in an extra aesthetic sense

If there is some affinity in the very different endeavors of Orson Welles, Caravaggio and Kant, it is because they provide a similar solution to the failure of earlier efforts to break free of the figure of 'the One'. They move back, as it were, from the multiplication of moments and planes in art and philosophy to the connective tissue that holds them together. For this reason, the consequences of their revolution in thought extend well beyond aesthetics and philosophy and meet up with a wider transformation in experience, where mediation and intervals take on a whole new productive capacity. The image of thought they offer us differs, in important ways, from the tropes of flatness and fragmentation that have dominated cultural theory in the last few decades.

In the 1980s and 1990s, it was popular to describe the cultural development of the post-war world as a progressive 'flattening' of experience. In the absence of any full and whole experience, the world comes to us in the form of isolated, flat signs. The flat, depthlessness of late modernity is the central thesis of some of the most influential works of cultural

theory in the late twentieth century, most notably Jean Baudrillard's *Simulations*, Jean-Francois Lyotard's *The Postmodern Condition*, and Fredric Jameson's *Postmodernism, or the Cultural Logic of Late Capitalism*. Lyotard describes the decline of Enlightenment *Grand Narratives* as a flattening of knowledge: 'The speculative hierarchy of learning gives way to an immanent and, as it were, flat network of areas of inquiry.'²⁹ Fredric Jameson and Jean Baudrillard identify depthlessness as a central element of the hyperreal culture of late capitalism. As daily life is speeded up and plugged into ever wider global circuits of information and exchange, it becomes more difficult to recognize any pattern in the randomness of events. So many events vie for attention at any one time that none of them can command it in its entirety, or in its 'depth'. Jameson famously captures this position with his thesis that late capitalism produces a schizophrenic consciousness of disconnected sensations.³⁰

Bergsonism suggests something altogether different: The 'postmodern' thesis that we had moved from a unified to a fragmented world overlooked an important dimension of our modernity. It disperses the figure of unity into a thousand tiny elements, or 'any- moments-whatever', which, by virtue of their isolated, fragmented nature, retain the principle of unity that they wish to overcome. In other words, the discourse of fragmentation does not yet approach the interval of association and exchange in which elements participate together.

To square the circle we opened up earlier when we began to follow Bergsonism through its various Catholic and structural forms, we will now follow the theme of depth and implication, which we located in Deleuze, a little further into McLuhan's work. The enigmatic fact we must now face is that where Deleuze follows the history of resonating intervals in the visual fields of painting and film, McLuhan pursues many similar themes – productive, resonating intervals, depth as a critique of atomism – in the audile dimension, specifically in the new experimental possibilities opened up by recorded sound.

In the previous chapter, we studied McLuhan's analysis of film as a 'break boundary' between the mechanical and organic worlds. It was however, listening, and the sonorous field that seemed to offer him and many of his contemporaries some insight into what 'multidimensional' perception might be like. Taking up a quasi-phenomenology of sound was a way of turning against what they took to be the square, flat geometrics of print and the stale bureaucracy and nine-to-five factory life that had accompanied it. For McLuhan and many of the public media intellectuals who came into his orbit, sound – recorded sound to be more precise – promised some insight into how we might pass from the flat

linear properties of the letter to the deep fluid continuity of electricity and information. We might wonder whether nineteen-sixties audio-philia reifies one of the senses or whether we would find the same rich phenomenological properties no matter which of the senses we privileged. In spite of these reservations and difficulties, I will suggest now that we stand to learn something important by pursuing elements of the Bergsonian critique of flat, mechanical composition in McLuhan's investigations of three-dimensional 'acoustic space'. What we find thrown into high relief here are two central elements of a science of intervals as it was emerging in the 1960s. These are the subtractive nature of perception, and the open structure of multiplicities that set philosophy and cultural theory off in pursuit of depth and complexity.

3

Sounds Complicated: Audition as 'Three-Dimensional Thought'

Let us recall the principle of non synchronicity that links McLuhan, Deleuze and Bergson: Our experience is increasingly structured by organic formations and resonant intervals, while our concepts remain the unidimensional and fragmentary residues of the mechanical world. In a 1964 conversation recorded with his friend Glenn Gould, McLuhan, like Deleuze, presents this untimeliness as a problem of planes and dimensions: 'We now live in three dimensions, he explains to Gould, even if we continue to think on single planes.'¹

To develop a 'three-dimensional thinking' that could capture the deep complexity of modern living, McLuhan pursued a Bergsonian-Thomistic analysis of sensory life, in which audition and sound occupied a privileged place. McLuhan was not the first to pursue the metaphysical significance of sound. Leibniz, Bergson, Deleuze and Michel Serres have all heard the call of the audile dimension. And still more recently, Jean-Luc Nancy has turned to sound as a way of understanding the subject as a 'space of resonance'.² Why, then does 'hearing... offer a model of understanding', as Michel Serres once suggested?

In the first case, because sound is 'omni-directional'. There is no 'point' of audition in the sense that we speak of a point of view. We find ourselves already immersed in a sonorous field. And for that very reason, sound is passively received, so the border between hearer and the heard, the active and the passive, is fluid and membranous. Audile sensations, finally, offer themselves to us in organizational structures that result from the mixing together and layering of disparate sounds. Taken together, these three features of omnidirectionality, passivity and multiplicity offer a sense of wholism and multidimensionality that stands in contrast to the mechanical themes of fragmented perception and distracted consciousness that have dominated cultural theory and

visual studies in recent years. For McLuhan, they offered a way of understanding the active, productive capacities of a medium. Glenn Gould's influence on McLuhan probably mattered a great deal here.

Glenn Gould's three-dimensional environment

At the height of his career as arguably then one of the world's greatest concert pianists, Glenn Gould quit the stage to experiment more fully with new forms of electronic communication, such as radio, television and recorded sound. In a conversation with McLuhan, recorded the same year he quit his live performances, Gould reports on the strange new multidimensional quality his playing had taken on. At one point, for example, he tells his friend that he expects that in the future, it will not seem strange to play the piano, as he has now begun to do, along with the noise of two radios or a television. The *Goldberg Variations* accompanied by the white noise of the TV set is not only the sign of a new kind of sound, but a whole new way of living that Gould calls 'three-dimensional experience'. McLuhan responds with one of his pithy formulations: 'we live in three dimensions even if we continue to think on single planes.'³

It was not just sound then, but electric recorded sound that seemed to offer McLuhan and Gould new insight into how to live with and in complex sensations. And the two Canadians were not the only ones making these connections. John Cage, The Beatles, William S. Burroughs, Michael Snow, Rolf Lieberman and others were all finding in the daily clamor and background buzz of the world resources for a new kind of sensory awareness and perception.⁴ Susan Sontag pointed out that what united them all was the conviction that sensation, rather than the idea, had become the basic unit of art.⁵ They were not interested in policing the borders of aesthetics, or explaining what art means, but rather in analyzing and extending sensations. It was this interest in generic sensation that, Sontag goes on to say, propelled the collapse of such familiar distinctions as art and non-art, and high and low culture. What mattered was not so much how a given signal had been coded – as rarefied high art or the lowly detritus of everyday life. Its aesthetic and philosophical significance lay simply in the fact of its being a sensation. In this climate, recorded sound then offered a way not only of isolating a distinct sensation but of understanding the way that a group of them could form in aggregates or blocs. In other words, it is not exactly the sensation but its differential, combinatorial quality that seemed to become 'thinkable' with recorded sound.

Cage, to take just one example, was fascinated by the inescapable background noises of modern living – the whirr of electricity, the continuous rumbling of traffic, the murmur of urban life. What interested him in all of this was not just the sheer diversity of sounds, but their capacity to congeal together into new unities. In one of his experiments, Cage set out to determine the total number of audio sources among which a subject could distinguish, before they all blended into a single new whole. What he discovered was that perception reaches a new threshold when five or more sounds are mixed together. At this point, the original audible elements lose their former outlines and merge into a whole new acoustical unity. Quantity turns into quality, as Hegel might say, when a sufficient number of sounds are mixed together. They then form a new unity that cannot be divided up into its original pieces.⁶

A century before, Wagner had redesigned the theater to try to filter out the noise of the modern world. But now Gould and Cage welcomed it back in. Wagner's approach to the chaos of modern living was to ask how art could survive in this environment – how could we purify the signal and focus a subject's attention? Cage and Gould pursued a far more interesting question: What new kinds of art could emerge in this environment, or even, as McLuhan wondered, might the multidimensional environment not only contain art, but be art?⁷

For Gould, it was the layering and mixing of disembodied sound that offered something new. The invention and spread of sound recording opened up new ways to hear and to be. Katherine Hayles has suggested that sound recording provided one of the first experiences of disembodiment, which in turn spawned the desire for the more radical transhumanist fantasies of artificial intelligence and virtual reality environments.⁸

Tape recording – as simple and ubiquitous as it now seems to us – made it possible to disembed sounds from their original sources and re-embed them in another time and place. The film sound editor Walter Murch explains how sound recording revolutionized sense perception:

For as far back in human history as you would care to go, sounds had seemed to be the inevitable and accidental (and therefore mostly ignored) accompaniment of the visual stuck like a shadow to the object that caused them. And, like a shadow, they appeared to be completely explained by reference to the objects that gave them birth: a metallic clang was always cast by the hammer, just as the smell of baking always came from a loaf of fresh bread. Recording magically lifted the shadow away from the objects and stood it on its own, giving it a miraculous and sometimes frightening substantiality.⁹

Recording allowed sound to be disembedded from its original source and isolated as a sensation. More importantly, perhaps, it also allowed it to be mixed together, or re-embedded with other, wholly unrelated sounds. Once sounds were mixed together in this way; they could not be easily divided back into their original parts, as John Cage discovered. Murch, a film sound editor for over thirty years, found something similar. Murch says that layered sound becomes dense, and he finds, as a sound editor, that in mixing sound, density and clarity are always traded off, one for the other.¹⁰

This density of recorded sound made it possible to explore the layered nature of perception in new ways. John Cage incorporated live electronic and found recorded sound into his music, making a happening out of whatever constellation of sound effects he happened to hit upon. Gould made the layering and interpenetration of voices and background sounds the basis of his groundbreaking 'contrapuntal' radio documentaries. Instead of presenting the usual horizontal montage that moves between distinct well-defined voices, as most radio does, Gould presents a vertically-layered multitude of overlapping conversations. Out of this noisy banter, he allows a phrase, a sentence, or an intervention to well up and then drift back into the great cacophony. In works like *The Idea of North*, Gould does not add together unified and readily intelligible bits. He begins with an unstructured dense mass. From this, he subtracts whatever does not interest him. He conducts the recorded voices as if he is pulling sound out of an orchestra – a baritone voice here, a high laugh there. Each voice is plucked from the void and then allowed to fall back into it. The Beatles used a similar technique on their later albums. They incorporated background environmental sounds that were allowed to drift in and out of the audible sphere. This kind of multidimensional layering soon became a standard motif of the psychedelic sound of Pink Floyd and others. In the 1970s, it gave rise to the whole new paranoid fascination with the subliminal message, which consisted of information lurking behind the main foreground plane of sound (a sonic equivalent of the conspiratorial theme that Fredric Jameson identified in films of the 1970s).¹¹

Multidimensional living

For McLuhan, the emergence of this new three-dimensional experience was part of a much longer and ongoing narrative that moved Western culture away from the visually oriented, linear and discrete space of the print era, to a culture based on electric circuitry and feedback loops

where things occurred simultaneously and without a central point. The linear properties of print had, supposedly, produced a linear Cartesian consciousness that mechanically fragmented experience into a series of flat, one-dimensional planes where information is parceled out in words, pages and books. Labor, accordingly, is divided into ever more specialized and codified tasks. Causes and effects are clearly separated, just as subjects and objects are. This allowed us to become individual egos with individual points of view.¹²

Virginia Woolf's Mr. Ramsey, by way of illustration, imagines thought to be like the alphabet ranged into twenty-six letters all in order: 'his splendid mind had no sort of difficulty in running over those letters one by one, firmly and accurately, until it had reached, say, the letter Q. He reached Q. Very few people in the whole of England ever reached Q.'¹³

Could it be, McLuhan wonders, that the world of electricity and cybernetic feedback loops might be better described by the properties of sound and hearing? In sound, as in an electrical environment, there is no center as such, and the margin is everywhere. We are so deeply immersed in this kind of environment that it is no longer possible to break it up into discrete groups or letters, or to find a detached point of view from which to do so. That would be like trying to have a point of view while swimming, McLuhan liked to point out.

Complex sensations require subtractive perception

Nineteen-sixties acoustic theory, as it might be called, throws into relief a new emerging form of perception that seemed very different from the familiar Cartesian one to which we had grown accustomed. Descartes had insisted that perception begins with clear and distinct, simple ideas, from which we build up to more complex forms. What we find emerging here instead is a deep Bergsonian theme. In *Matter and Memory*, Bergson contests the common 'associationist' notion that perception consists of discrete sensations plus the attention we bring to them. Instead, he argues that perception is a subtractive operation. When we set out to know, we are already adrift in a mass of sensations. We find ourselves already thrown into a multiplicity (a virtual totality) of sensations that lack clear outlines and divisions. To perceive in this environment, we do not add together bits of information. Just the opposite is true. We subtract from this mass of sensation what does not interest us, or what is not useful for life. From out of the mass, we divide sensations into groups, categories or distinct things.¹⁴

What we experience as a discrete sound is the result of our dividing up a multiplicity of sensations. What presents itself to us as a clear signal is produced by our act of cutting up a dense, unclear noise. Perception moves from a virtual, over-determined mass to a clear and distinct signal that is subtracted from it. The selection of a signal, however, in turn changes the wider ecology of sensations and makes it possible to link it up with others in another, different configuration. Thus, we are continuously moving from density to clarity and back to density once again.

As sound recording made possible a more radical disembedding and re-embedding of sensation, it greatly facilitated this Bergsonian sensibility. Recording removes sound from its immediate indexical function as a representation of some particular vibration and allows it to be called on for more phenomenological purposes. In John Cage's experiments with live sound, Rolf Lieberman's concert for 164 typewriters, or Glenn Gould's TV noise, sound is valued not as evidence of the world, but as a sensation with its own qualities, and organizational structure.

The French audio theorist Michel Chion develops this difference between sound as evidence and as sensation into a useful distinction between causal and reduced modes of listening. When we listen causally, we treat sound as evidence of a source of vibration. When we tap on a chest to determine how full it is, or shout down a dark well to determine its depth, we are listening to sound for information about its source – for the shadow of the object, as Walter Murch puts it.¹⁵

The mixing of sound that becomes possible with tape recording puts this kind of causal listening to the test. When sounds no longer refer back to their sources, we are able to listen to them not for what they reveal about the world, but for their own properties as sensations. This is what Chion, following Pierre Schaffer, calls 'reduced listening'. 'Reduced' is meant in the phenomenological sense that Husserl gave to the term. Phenomenological reduction suspends our immediate natural attitude to the world and directs us to the things themselves. For Gould, McLuhan, Cage and their contemporaries, the study of sound was interesting for what it revealed not only about any particular sensation, but about the organizational structure of a multiplicity of them.

Multiplicities and micro-perceptions: Leibniz and Virginia Wolff at the seashore

Bergson criticized the tendency of vision to divide the world into discrete blocks of perception. He associated vision with quantity and number and often turned instead to the structure of sound and melody

as models for understanding the multiple character of complex emotions and sensations. Long before Bergson, Leibniz saw in complex sounds a model for studying phenomena that could not be classified under the received categories of unity. Gilles Deleuze takes Leibniz's account of the composite sound of a wave as a paradigmatic example of the ways that conscious perception emerges from a folding (fold = pli) of a multiplicity (multi ply) of indeterminate perceptions.

The sound of a wave is composed of a thousand tiny (micro) perceptions that are already at work in the background, preparing and following whatever rises to consciousness as a macro perception. The wave is not a simple, clear given that produces an affect in us. It is the product of a set of relations among preconscious or molecular perceptions that are not, in themselves, discernible. Here is how Deleuze describes it:

For example, the sound of the sea: at least two waves must be minutely perceived as nascent and heterogeneous enough to become part of a relation that can allow the perception of a third, one that excels over the others and comes to consciousness (implying that we are near the shoreline).¹⁶

We only hear the wave as a composite sound. We can not get to the individual bits of sound, even though it is clear that what we hear is a contraction of smaller units. Before they ever emerge into consciousness, the micro-perceptions enter into differential relations and together produce some other, third thing that is different in kind from either of them. The sound of a wave therefore exceeds the categories of the general and the particular, and the one and the many. The composite elements are smaller than any particular. They are 'pre-individual' because they are not discrete, distinct things, but differential elements. And they are larger than any universal (because the whole can be reconfigured once again). In fact, when we hear it, it is already on its way to being rearticulated into some new form.¹⁷

Since we already called on Virginia Woolf's Mr. Ramsey as an example of Cartesian consciousness, we might consider his wife, Mrs. Ramsey, as the aural Leibnizian. Virginia Woolf's stream of consciousness captures Mrs. Ramsey's thought as a layered complexity of the evening's sound. Each particular sound presents evidence of some minor event, and the layering together of all of them then tells us how the day unfolds as an open unity.

The gruff murmur, irregularly broken by a taking out of pipes and the putting in of pipes which had kept on assuring her, though she could not hear what was said (as she sat in the window), that the men were happily talking; this sound, which had lasted now half an hour and had taken its place soothingly in the scale of sounds pressing on top of her, such as the tap of balls upon bats, the sharp, sudden bark now and then, How's that? How's that of the children playing cricket, had ceased; so that the monotonous fall of the waves on the beach, which for the most part beat a measured and soothing tattoo to her thoughts and seemed consoling to repeat over and over again as she sat with the children the words of some old cradle song, murmured by nature, I am guarding you (I am your support but at other times suddenly and unexpectedly, especially when her mind raised itself slightly from the task actually in hand, had no such kindly meaning, but like a ghostly roll of drums remorselessly beat the measure of life, made one think of the destruction of the island, and its engulfment in the sea, and warned her whose day had slipped past in one quick doing after another that it was all ephemeral as a rainbow) this sound which had been obscured and concealed under the other sounds suddenly thundered hollow in her ears and made her look up with an impulse of terror.¹⁸

Leibniz and Virginia Wolff listen at the seashore not only for evidence that the world exists, but also for insight into the nature of complex sensations. In a similar way, for McLuhan and Gould the audible dimension provided a general model, or paradigm, for understanding the phenomenology of complex perceptions that were reorganizing the social and sensual world of the 1960s. The wave of sound and image that rolled over the twentieth century did not leave us flattened and fragmented as Jameson, Baudrillard and others would have us believe. It immersed us in a structure with depth and multi-dimensionality. Nineteen-sixties audile theory may then represent an important archaeological moment, and an alternative genealogical ancestry of our present, when media were being recognized as active milieu, transformative agents, capacitors and wholes that allow the diversity of being to morph and change from one shape to another.

4

Noise Is the Presence of the Medium

Michel Serres also turns to hearing as a 'model of understanding'. Sound reveals the productive capacity of our milieu. We hear multitudes of sensations congealing into wholes that are neither simply unified nor fragmented. These are structures that Serres, like Bergson before him, calls 'multiplicities'. In *Genesis*, he gives many beautiful examples of some kinds of life that have this layered, interwoven and open quality:

A flight of screaming birds, a school of herring tearing through the water like a silken sheet, a cloud of chirping crickets, a booming whirlwind of mosquitoes... Crowds, packs, hordes on the move.¹

If we think of these images of animals and insects and roaming hordes as collections of many things, then we risk reducing their 'multiplicity' to meaning simply the numerous, i.e. several instances of what remain distinct entities. The many is not precise enough to catch the sense of creation and activity in 'a flight of screaming birds'. Many still derives its meaning from the figure of unity and leaves us with an image of several iterations of the same. To write the ontology of the active milieu, on the other hand, one needs to escape 'the hell of dualism',² to get beyond the dialectic of the one and the many and to think the multiple as such:

a set undefined by elements or boundaries. Locally, it is not individuated; globally, it is not summed up. It is not an aggregate; it is not discrete. It is a bit viscous perhaps. A lake under the mist, the sea, a white plain, background noise, the murmur of a crowd, time.³

Serres likes to point out that the word 'media' is related, etymologically, to 'milieu' and 'means'. A theory of media is always also a theory of

environment, of how media produce a milieu that acts upon and affects the content of the message. His books are filled with images of middles, medians and transformative in-between spaces. Airports, switching stations, ropes, roundtables, eddies, streams, jokers, even the northwest passage are all resources for reflecting on the mediality of life. 'My work has only one title, one subject: connection', he explains to the Australian journalist Mary Zouzani.⁴

Bergson has played a significant role in the background of Serres' work, perhaps most importantly as one of the first thinkers to build a metaphysics of the irreversible, thermodynamic time that informs all of Serres' work. Serres and Bergson share a common vision of evolution as the movement from a mechanistic to a resonant world, and they both see in the limits of mechanism the emergence of new kinds of conceptual problems that point us beyond the division between the humanities and natural sciences.

I want to pick up on two points where Serres' work overlaps with, and helps to elaborate, Bergson's metaphysics of the middle: the productive, transformative nature of intervals, and the resonant, intervallic quality of multiplicities. I start out from a deceptively simple theoretical conundrum on which their philosophies of the middle converge: A medium is a necessary means to convey change, but, because media can be speeded up and made more efficient, we also regard them as obstacles in the way of a more effective delivery of a message. We regard media as both means and obstacles, and this leads to a number of important and difficult problems that have only become more important since Bergson: Can media ever produce immediacy? What must mediation be if it does not go away? Why is there always a middle? Can the means be considered independently of the content that passes through them?

In *Creative Evolution*, Bergson presents the problem in this way: 'If I want to mix a glass of sugar and water, I must, willy-nilly, wait until the sugar melts. This little fact is big with meaning.'⁵

The big meaning is that the water, the glass and the sugar form a whole, and before we can enjoy our drink, this whole has to pass from one state to another. Even if, as Deleuze points out, I stir it up rapidly with the spoon, I still have to wait for some transformation to occur. The work of transformation is not in the elements that are mixed together. Something must change from state A to state B. Bergson's point is that the sugar, water and glass form a whole, and the transformation of these substances into a new sugary water state requires a change in that whole, of which they are all parts. The whole, for Bergson, is not a fixed and finalized state but a set of open relations, or said otherwise, the

transformative capacity of a qualitative multiplicity. In other words, the whole is not a fourth thing added to the sugar, glass and water, but a milieu in which they all participate.

There are channels, so there must be noise

In Serres' philosophy, we find a very similar concern with the productive activity of the middle. A medium is often considered a kind of movement. Most often we, mistakenly, think of this movement as a binary structure with a beginning and an end. The origin and the terminus of a communication, it seems, are two essential points that share some kind of analogical resemblance. A message is moved from a sender to a receiver. It follows then that, in this schema, a perfect mediation would be one that disappears in the act of communicating. Serres summarizes the problem in this way:

Given: two stations and a channel. They exchange messages. If the relation succeeds, if it is perfect, optimum, and immediate, it disappears as a relation. If it is there, if it exists, that means that it failed. It is only mediation.⁶

In other words, as long as we regard the middle as an inert space, then mediation seems to stand in the way of a more direct communication. 'Perfect, successful, optimum communication no longer includes any mediation. And the channel disappears into immediacy.'⁷

But communication requires, at the very least, the presence of two different stations and a means of moving between them. The message has to move thorough a middle, and each middle, it turns out, has its own distinct properties that affect the message in precise ways. If we take seriously this affective capacity of the middle, then the medium appears not only as a conduit but also a 'space of transformation' where something happens to the message. From the point of view of the sender who wants to produce a specific effect, this affective capacity is interference, or noise. This is precisely where Serres' philosophy of communication really begins – with the ineradicable noise of the medium. Noise is the presence of the medium, or put still more simply, 'There are channels and thus there must be noise.'⁸

In our usual notions of communication, noise is an unwanted third thing that interferes in what would otherwise be a clear connection between a sender and a receiver. On closer reflection, though, noise is

more complex. To being with, it always indicates the wider context, or 'milieu' in which communication takes place. A message must pass through a medium. The medium generates effects that attach to the message. Noise, therefore, is an ineradicable feature of any communication. Noise is the presence of the medium through which the message must pass. Each new innovation in media promises to minimize noise but inevitably generates its own, new brand of clamor. This battle with the medium is never fully successful, because we can never eliminate the space of transmission. There is always a context of communication, or an environment, and so there is always a noisy third term. He writes: 'We are surrounded by noise. We are in the noises of the world, and we cannot close our door to their reception. In the beginning is the noise. The real seems to me to be stochastically regular.'⁹

The analysis of noise therefore proves to be far more interesting than we might have suspected. Noise directs us away from the message itself toward the medium in which it is given. Like Deleuze's idea, which we encountered earlier, that the world is the remainder, left over after our equations have linked its diversity into sets and resemblances, here in Serres' philosophy of communication, noise is the 'third man', always on the perimeter of any circuit of senders and receivers. In order to communicate, sender and receiver have to battle with the clamor of the milieu. No matter how opposed the terms of their debate, they proceed on the understanding that they can minimize the threat of noise and control the environment in which they transfer messages.

The attempt to eliminate the noisy middle changes the relation of sender and receiver. Security measures we introduce to protect us from the threat of terrorism, for example, change the very community we set out to protect. Every attempt to create better channels of communication between parents and children, by aping the language of our children, or compelling them to be clearer with us, changes the relation of the generations. In short, the reaction to noise, whether it is to incorporate it, or to try more effectively to expel it, transforms the communicants.

Serres' theory of noise changes in important ways through his career. In his early work, noise appears to interfere in communication. Critics have pointed out an element of idealism in his early *Hermes* work, where he sees the empirical variations in communication – e.g., accent, misspelling – as the extraneous stuff to be removed.¹⁰ In his later works, however, he begins to see noise as a positive force in communication. The result is his work on the 'parasitic' quality of noise.

Noise is to communication what a virus is to a organism

In French, 'parasite' can mean one of three things: an organism that lives off a host, a social loafer who takes a meal and gives nothing in turn, or static/white noise in a communication circuit. These very different senses of the term – biological, social, informational – share a common principle that we might call simply 'interference'. In each case, the parasite interferes in, and ultimately upsets, some existing set of relations and pattern of movement. It compels us either to expel it, or to readjust our internal workings so that we can accommodate the needs of the parasite. Noise, in other words, is to communication what a virus is to an organism, or what a scapegoat is to a community. It is not simply an obstacle, but rather a productive force around the exclusion of which the system is organized.

It is beyond the scope of our analysis here to address the full implications of the biological theory of parasitism, but we should note that recent work in virology supports Serres' claim of the productivity of the parasite. The American virologist Luis Villarreal suggests that new work on the role of viruses in evolution is transforming our accepted ideas of 'life'.¹¹ Viruses challenge the accepted doxa that the cell is the basic unit of life, because it contains the material for its own replication. Viruses are purely relational beings that must live off the life force of some other thing. Because they lack the capacity for self-replication, viruses have been thought, until recently, to be only partly in being, or to have some problematic, liminal status outside the web of life. Villarreal and others now believe, however, that viruses are far more complex and challenge our ideas of what constitutes life. What they suggest, in fact, is that cells may have required viruses in order to evolve. All of which affirms Serres' basis premise of the productivity of the parasite and, more generally, the principle that relations precede being.

Serres' revaluation of 'parasitic' noise builds on a basic principle of information theory. In Claude Shannon's pioneering work in information theory, noise is recognized as a necessary consequence of transmission.¹² The snow on the television set, the hiss on a tape, or a missed registration in a printing operation are all instances of noise, or parasitism. In each of these cases, the presence of the medium is registered in what would, seemingly, otherwise be a clear transmission. Noise always signals the presence of the medium through which the message must pass.

Claude Shannon recognized that whether or not a certain effect is considered noise depends on one's position in the listening chain. Noise

is interference only from the sender's point of view. From the point of view of the receiver, it may be considered a part of the information packet that is transmitted along a channel. When we hear the earliest sound recordings of Tennyson reading 'Charge of the Light Brigade', for example, the watered-down and scratched-out sound conveys the enormous passage of time, just as the static sound of Neil Armstrong's voice on the moon tells us something about his physical distance from us, and the newness of space technologies in the 1960s. It would not be difficult to think of countless other cases in which the presence of the medium mixes in with the intended message to produce some whole new effect, not intended by the sender, but taken as information by the receiver. In these cases, noise is not simply an extra third thing to be discounted. It has entered into the message and become part of it. To speak technically, the signal now has an 'equivocation', which is to say that two messages pass along the same channel. The sender may not have intended this, but the receiver may welcome it.

Parasitism in the spy and detective genres

The detective genre offers instructive examples of this productivity of noise. The popularity of shows such as *C.S.I.* lies not so much in their capacity to puzzle into the mind of the killer, as in the kind of 'media analysis' one finds in them. Typically, the killer wants to send a message by marking up a body, or dressing his victim in a certain way. The police, being good semioticians, ignore this message and seek out the unintended communication, the way that the medium attaches itself to the signal. They look, in other words, for equivocation in the message.

It is because the killer or thief operates in an environment/medium that he or she can be detected. The dirt that attaches itself to the car, the fiber from a couch, and the procession of insects that arrive at a dead body in a predictable and datable sequence are all things over which the killer exercises no mastery. They constitute an environment, or a medium in which he or she operates. The police recognize a basic principle of information theory that is also the starting point of Serres' work: Noise does not indicate a lack, but a surplus of information. And a medium/milieu affects, or acts upon, the signal. The active intention to transmit a signal requires that we open ourselves to the passive reception of the medium in which it occurs. Marshall McLuhan began his media analysis on exactly the same point. 'The medium is the message', he explains, means that the user become the content of the message. The user is used by the medium.

The parasitic relation of means and ends is almost always the central plot device of spy fiction. John Le Carre's *The Spy Who Came in from the Cold* contains all the essential elements of the espionage scenario. Martin Ritt's filmic adaptation of the novel captures the cold war atmosphere of Berlin, in the early 1960s, shortly after the erection of the Wall. The world is divided in two, with each side listening in on the other.

The plot revolves around Leamas, a British spy operating in East Germany. He wants to return from the field, or come in from the cold, but before he does, his British handlers have a final job for him to do. He first has to help bring down the reviled East German spy master and former Nazi Commandant Mundt. Leamas is instructed to defect to the East and provide KGB with false information that will frame Commander Mundt and lead to his trial and execution in East Germany. Leamas is instructed to leave a trail of clues that will lead the East Germans to suspect that Mundt is a double agent operating for British interests inside the East. Control, Leamas' British spymaster, instructs him:

They'll interrogate you of course and bit by bit you'll come across with the evidence that will kill Mundt. Just feed them a stray fact here and a stray fact there. Let them piece together the clues and facts into the story we want them to believe.¹³

Control's plan supposes, as all spy plans do, that we know what the other will assume and how they will act on this knowledge. The spy supposes a regularity of relations, a chain of actions and consequences that will follow with a fair degree of precision. Once such a system of order has been established, a good spy can transform the others' desire and anticipation into a means for his own purposes. Parasitism is always a reorganization of ends and means. This asymmetrical one-way flow can be endlessly repeated, with parasites parasitizing parasites. And this is, after all, what makes the spy's world so compelling: Who is listening? Who is listening in on who is listening? The subject, Serres says, is the one who makes the least noise.

What Leamas does not know, though, is that the attempt to trap Mundt is itself a trap. Control knows that Fielder, Mundt's underling, already suspects the truth that Leamas does not yet know, which is that Mundt is a double agent working inside East Germany for MI5. The British plan to frame Fielder before he gets a chance to put all the necessary information together and expose Mundt's double cross. So, Control feeds Leamas information to feed to Fielder, who in turn will pass it on to his supervisors in the KGB. Meanwhile, MI5 uses

this circuit between Leamas and Fielder to direct an other, different message to KGB. Unbeknownst to Leamas, Control allows enough information about his own agent (Leamas) to slip into the East so that suspicions will be raised about his allegiances. Control wants Fielder's supervisors to suspect that Fielder has conspired with Leamas and MI5 to fabricate information and bring Mundt down. This will allow MI5 to use KGB to eradicate Fielder before he has a chance to make a more convincing case of the real truth, which is that Mundt works for MI5.

Each agent in this complicated chain – Control, Leamas, Fielder, Mundt – acts on the assumption that he acts without reaction, that he listens without being heard, that he turns the action and intentions of another into a means for some other purpose. They do not eradicate the channel they occupy. They try to remediate it, or to turn it toward a different purpose.

Means and ends

Cold War parasitism reveals the endless relay of ends into means into ends, but it also raises an important question about the political nature of means and media, which we will now take up in more detail. The ends we pursue can be turned into means for the realization of interests other than our own. Zigmunt Bauman has shown how this organization of means and ends is the basic element of domination.¹⁴

If I am dominated, according to Bauman, it means that I am in a situation in which I can achieve my own goals only by serving the interests of some other. I can only deal with money, for example, by serving the interests of the financial institutions. Every action I take to satisfy my own material needs must first serve another's desires. This may occur, in fact most often does, without my knowledge. If parasitism has a such a clear relation to domination, then why, we might ask, does Serres embrace it as principle of ethics and even a condition of love? How does the logic of parasitism differ from a logic of domination? Is it a cold, heartless philosophy of abuse? Another variation on the selfish gene? Or is something else at work?

Serres takes the principle of parasitism in new and interesting directions. He follows the French biologist Henri Atlan in arguing that equivocation, or noise, in a system should not be seen as a lack that takes away from communication. It is a positive force that does something. Atlan argues that noise prompts a system to reorganize in a more complex form that incorporates the disturbance.¹⁵ Here we really find the heart of Serres' theory of the parasite.

Atoms lead to ontology, the parasite leads to relations

The parasite acts on some existing communication, be it biological, informational or social. It instates itself in the circuit between a point of transmission and one of reception. The parasite does not act directly on either the sender or the receiver. It acts on the relation that joins, for example, an enzyme and the protein it breaks down, Marconi's human voice in St. John's and its telegraphic translation in Ireland. Serres is quite precise about this. The parasite always acts on relations. It has a relation not to things, but to relations. This is why he says that while atoms lead us to ontology, the parasite leads us to relations. What he seems to have in mind here is what Heidegger and Derrida called 'ontotheology': the Greco-Christian principle of a highest existing being that needs no other in order to be what it is. This basic metaphysical principle is one with an image of the universe composed of entities that are first of all self-identical and complete, before they enter into relations. Parasitism leads us to a very different image of the world in which there are always already relations that are opened to further mutation and parasitism. Thus: the parasite has a relation to relations.

The parasite finds its way into the relation between sender and receiver, or guest and host. And once inside that relation, it compels the communication circuit as a whole to adjust to its presence. This reaction can take one of two forms. The host might do all it can to eradicate the parasite, or it might rearrange things to accommodate its needs. In either case, the presence of the parasite means that things cannot, and will not, remain the same.

In the case of biological and social parasites, this change takes place as an alteration of the guest-host relation. The parasite creates a new milieu in which the host can achieve its goal of serving the guest, only if, at the same time, he serves the interests of the parasite. I can get what I want – extracting oxygen from the air, providing for my children – only in those ways that please the parasite, and often without my knowledge that this is occurring.

The most successful biological parasites are able to sustain this guest-host relation. They do not kill off their hosts, since they, too, would die in the process. Instead, these parasites learn to keep a guest alive and to produce a new equilibrium in which both can flourish. The parasite does not simply cancel the existing system. It treats it as a resource for the creation of a new, different order. In other words, it uses the existing system as a means to its own, new and other end.

Since the parasite takes a given end – the satisfaction of entertaining a guest, the homeostasis of my body – and turns it into a means to achieving something else, we may consider it a figure of pure mediality. Its medial properties help us to recognize the productive element of intervals that Bergson wanted to describe in his example of the sugary water. To appreciate this productive quality of media, we have to be careful to note the important difference between parasitic entities and parasitism as a general function of evolving systems. In Serres' schema, guest, host and parasite are not substantial entities. They are positions or functions through which any entity – informational, social or biological – must pass. Serres writes:

I thought that the exchangers were intermediaries, that interference was on the fringe, that the translator was between instances, that the bridge connected two banks, that the path went from the origin to the goal. But there are no instances. Or more correctly, instances, systems, banks, and so forth are analyzable in turn as exchangers, paths, translations and so forth.¹⁶

Parasitism as pure mediality

In other words, each point in the system – end, station or atom – assumes in turn the roles of host, guest and parasite. The guest and host functions are always coupled together in a working relationship. To work, they must cooperate in excluding a 'third man' and neutralizing the milieu in which their exchange takes place. Whatever occupies the third 'parasitic' position, however, always works toward the inclusion of the middle.

The action of the parasite is to go to the relation. It instinctively goes to the mediations, occupying them all. It intrigues. This third, it must be said, is included.¹⁷

In short, each new host tries to stabilize relations and, as it does, it finds itself in an antagonistic relation with its milieu. Particular parasites may come and go, but parasitism is an ineradicable condition of any regularity in relations because any relation between distinct entities (guest and host) must occur in the midst of a medium, and the medium always threatens to attach itself to the signal passing through it. So, parasites parasite parasites. This is very different, Serres explains, from the Hegelian problem of how the slave becomes master of the master.

The master slave dialectic describes how a subject becomes an object, or vice versa. The parasite, however, is in the place of neither the subject nor the object. It is a device, an operator, by means of which one is able to turn into the other. It has a relation to the relation between subjects and objects.

The parasite is a figure of 'pure mediality'. It is a means not in the service of any end. It is the irreducible remainder that persists, no matter how efficiently we organize our schemas. As noise, it signals the presence of the medium and the impossibility of all fantasies of im-mediacy.

Part II

Killing Time: Synchrony and Diachrony

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5

Instrumental Reason and the War on Intervals

Instrumental reason and immediacy

The noise of the medium is not only an aesthetic or informational problem. In the Frankfurt School, the desire for immediacy, and the drive to eliminate medial noise is a central feature of instrumental reason, and is recognized as the basic cell of the highly rationalized and totally administered society of advanced capitalism. Developing on the ideas of Max Weber and Georg Lukacs, Max Horkheimer, Theodore Adorno and colleagues identified a new kind of reason that is marked by an excessive concern with means. The instrumental reason that we find in capitalism, bureaucracy and technocratic thought suspends discussion of ends and values to devote itself more fully to the perfection of procedures and means. Professors, for example, talk less about ideas and more about the media – grants, computers, conferences – for delivering them. Filmmakers talk about ‘the industry’ more than the composition of images. In a world of instrumental reason, everything becomes ‘a means to its own consumption’, as Fredric Jameson nicely summarizes it.¹ This kind of reason is not tied to any single sphere of activity. It defines our relation to nature, to others and even to our image of mind and reason. For Horkheimer and Adorno, it is responsible for nothing less than the decline of the individual, the rise of fascism, technological rationality, the authoritarian personality and the totally administered society.

Instrumental reason specializes in means and media, but it does not regard these as valuable in themselves. The means matter, but only because they help expedite a more efficient passage through the middle toward a goal that has been determined by some other agency, such as the market, or the rating polls. Horkheimer and his colleagues recognized that we now have as much to fear from this logic of immediacy,

as from the chaos – nature, the body, the ravages of time – which it was meant to control. Which is a greater threat: the weather or weather science, pestilence or superbugs, contingency or the risk management that controls it?

Still, what the Frankfurt School offered us was often not an analysis of means per se, but a critique of the illegitimate ends they are made to serve. In the logic of instrumental reason, the end is provided by some irrational agency and everything around us becomes a rationalized means in its service. In *Dialectic of Enlightenment*, we read ‘It is not that chewing gum undermines metaphysics, but that it is metaphysics.’² The basic gesture of the Frankfurt analysis is to show how the end, however trivial or absurd (bubblegum!) maintains all its theological significance even in the secular and totally administered climate of the market.

Benjamin on empty, homogenous time

We move through the world in a dance, an assembly line, a movement of self-reflection, or a fluctuation of the soul. Whatever the purpose that animates us, our movements always form a whole made of three moments: a beginning point, a final aim, and between these an interval of time in which the change in motion takes place. These moments can be organized in different ways. Most often, we imagine them to form a series in which time’s interval serves only to communicate an idea from an origin to a terminal point. The interval itself does nothing to determine the value, or purpose of the motion. Millenarian movements provide an exaggerated version of this common structure of time and movement, but it is present, too, in the more familiar motions of daily life. It is there in the time we waste waiting for visas to arrive, for medical diagnoses to be processed and for computers to load up and shut down.

The desire we often feel, in these moments, to ‘kill time’ originates in a difficult problem at the heart of our common perception of temporality. We imagine time’s interval to be not only a means of consummating some idea, but also, paradoxically, an obstacle in the way of its consummation. The word ‘interval’ itself derives from ‘inter vallum’, literally ‘between the walls’, or in the case of a temporal interval, between present and future. This spatial imagery creates the impression that the future ‘exists’ at the same time (or in the same ‘space’) as the present. A formal resemblance between the idea and the impending moment of its realization (i.e., an investment and its future maturation) seems to precede the interval of time necessary to achieve the change. But if the future was already present, we would never have to wait for it to arrive. We have

to wait and live through intervals because the sequences in which we find ourselves are not yet complete. The intervals we live through do not impede our access to anything actual and real. We remain caught in time and are never able finally to kill it, because the interval is that moment of hesitation in which the future, terminal point of our actions is 'de-termined'. This image of times' interval as period of determination suggests a much different structure of time and movement, one in which the interval does not impede movement but is itself the process of the creation of a movement's terminal point. As a result, we experience time as an extraneous obstacle, the elimination of which is necessary to secure plans. The more efficiently we can eliminate time – with agendas, planners and efficiency experts – the more readily we can accomplish our goals.

Walter Benjamin identified 'empty, homogenous time' as the most basic infrastructure of this kind of 'instrumental reason'. Benjamin's critique of the empty time of modernity has many important parallels with Bergson's investigation of the any-moment-whatever of scientific time. In 'bourgeois society', no moment has any value in and of itself. Time appears to us as a planned and rationally calculated sequences of events. Once an end has been projected – in the long projections of investment cycles, or technical planning – each moment on the way toward it is the same (or homogenous) in as much as it is a means for realizing the one to follow. Like Bergson, Benjamin identifies the defining feature of modern experience as the separation of time from the activities taking place in it.³

Each 'empty moment' is an 'any-moment-whatever' that may be rationally organized in schedules and imposed on activities. And like Bergson, Benjamin sees that empty time is not simply negative, but is dialectically ambiguous. Bergson had called for a complimentary science that would push beyond the analytic fragmentation of time to develop a better understanding of the relations that hold these moments together. In Benjamin, we find a similar desire to see what new possibilities of human experience and sensation are made available by the breakdown of an older feudal time, and the climate of distraction, shock and emergency that comes to replace it as 'bourgeoisie time'.

Benjamin and Bergson

Benjamin finds Bergson helpful in this project but remains critical of what he understands to be a backward-looking romanticism in Bergson that valorizes an older, pre-modern experience of duration

and an interior 'poetic' insight. In spite of these hesitations, though, Benjamin admired Bergson's philosophy of time and took up many of the central problems it addressed, including memory, duration and the philosophical significance of mechanization. He distanced himself from Bergson's metaphysics, though, because he thought that Bergson tried to ground philosophical reflection in the interior insights of a poet. Benjamin, the Marxist, preferred to take his cue from the social figures that exemplified modernity – the flaneur, the waged worker, the news reporter. But these differences may be superficial, compared to the deep correspondences we find when we punch beneath the surface. Benjamin's concern with the discrete and sterilized 'empty time' of bourgeois society echoed Bergson's critique of the hermetically sealed any-instants-whatever of scientific time. Both are concerned with what new insights into the temporal dimension of human experience are opened up by mechanical media.⁴

In the place of Bergson's poetic interior reflections, Benjamin turns to Baudelaire's reflections on the life of the gambler, the worker, the prostitute and the flaneur to understand the new forms of life that emerge in the age of mechanical reproduction. The basic problem that Benjamin pursues here is not that far from the one that occupies Bergson: How can long experience or continuous duration be translated into the language of immediate experience, or any-instants-whatever? Both Bergson and Benjamin aim to develop a critique of the fragmentary atomization of modernity, without falling back into a simple valorization of the long *durée* of the pre-modern, feudal time it destroys.

Before we turn our attention more fully to Benjamin's relation to Bergson, it will be helpful to explore in a little more detail just how the instrumental reason of contemporary life turns the anxiety of the middle into a war on time. What I will want to draw attention to here is the way that means and ends are reorganized to produce a forward-looking, 'asymmetrical' time that is tied to a sense of crisis and structured in the form of what I will call a 'prolepsis' – a time that regards the future as already accomplished. From there, we can see how the dialectic of habitual and proleptic time is transposed into the aesthetic categories of contemplation and distraction in Benjamin's work on mechanical art, and in the distinction of long and immediate experience in the *Arcades Project*. Working through these distinctions lets us see how Benjamin's efforts to overcome the opposition of the long and the immediate overlaps with Bergson's attempt to surpass the dichotomy of discrete and continuous forms of organization, particularly in his concept of the 'past in general'. Both Benjamin and Bergson reject the effort to privilege

either continuous or fragmentary time and instead explore the insights opened up by experiences of temporal interruption and breakdown – the shock effect in the case of Benjamin, sensory motor failure for Bergson. We will then take up this theme of ‘truth through mechanical breakdown’ in a more detailed way in the final, third section of the book.

Killing time

For the Frankfurt School, the temporal structure of instrumental reason offered a way of understanding how the logic of the commodity found its way through the whole social fabric, and rearranged in its image all the various registers of human experience, from economics to love and on into aesthetics. Instrumental reason, or ‘reification’, as Lukacs calls it, has this holistic, far-reaching quality because what it alters is not any particular activity, but time itself, which is the most basic elementary structure of any event.

The difficulty we then encounter is the very one Bergson identified in his example of the sugary water: If the future was already present, we would never have to wait for it to arrive. We have to wait and live through intervals because the sequences in which we find ourselves are not yet complete. The intervals we live through do not impede our access to anything actual and real. We remain caught in time, and are never able finally to kill it, because the interval is that moment of hesitation in which the future, terminal point of our actions is determined.

The truth is that we live in the middle, between a present away from which we are moving, and a future which we are in the process of creating and which, therefore, does not yet exist. Human existence is then properly intervallic and ‘chronogenetic’, or constitutive of the structures of time in which it occurs. We are forever in the midst of things because, along with whatever concern preoccupies us at the moment, we are also creating the interval of time in which it occurs. It is because our being occurs in this ‘intervallic’ form that we can have time or lose time, and that we can gain or expend time, and that there is time to be organized into different economies. This means that time’s interval, the middle that is the bane of instrumentality, is not an extra supplement added on to the present. There is always a ‘third world’, as Serres calls it, between present and future.⁵ We never live in the present. We live in this third world of intervals.

This image of time’s interval as period of determination (literally, making the terminus) implies a much different structure of time and movement, one in which the interval does not impede movement, but

is the sphere in which the end or goal (the terminal point) is determined. This is not only a conceptual problem – How does our experience differ from God's? What is finitude? – it also concerns the most basic matters of daily living. After all, what puzzles us most now is not the thoughts of God but the unimaginably complex system of social relations that produce the clothes we wear, the meals we eat and the fluctuations in investment cycles and employment rates that threaten our further access to these things. The increasingly global synchronization of social life that has been underway now for several centuries has progressively separated the politico-economic conditions and the lived contents of experience. The antecedent causes and the future consequences of our actions become mysteries to us. At work, in the market or driving in my car, my movements form part of a sequence, the totality and meaning of which perplexes me.

The history of social thought is populated with terms that describe this separation of our actions and the meaning of our actions. What unites all the great themes of twentieth-century social thought – alienation, instrumental rationality, reification, anomie – is the recognition that, in ever more social practices, we experience the present not as part of a project which we are actively and volitionally bringing into being, but as a set of functions and reactions to preformed events which we did not create, and over which we effect less and less control. It is always the interval between present and future that is at stake in this separation of our actions, and the value and purpose of our actions.

Asymmetrical time

Since the fifteenth century, according to Reinhart Koselleck, the space of experience and the horizon of expectation have existed in a new kind of tension. The future of modernity is an 'open' one.⁶ That is to say, in relation to the pre-modern experience of time, the future is less predictable and arrives at an ever faster pace. European modernity is marked by a newfound dynamism, which Koselleck calls a 'temporalization' in social relations.⁷ We no longer see our experience as a reflection of a higher transcendent order. Instead, our worldly finitude contains the principle of its own organization and the means of creating novel, unprecedented events. This change in time-consciousness provided the general condition for the European Enlightenment, the birth of the Human Sciences, and the projects of human emancipation and self-assertion we associate with them.

Niklas Luhmann has shown that the unavoidable result of our 'asymmetrical' time-consciousness is a pervasive sense of risk which falls over

events. Risk is the consequence of living in a disenchanted world where human events lack any divine origin. When things cannot be referred back to the eternal now of God's mind, when there is nothing but this world, we start to recognize an asymmetry between the present we are living through, and the future we are in the process of creating. The pre-modern distinction between a transcendental eternal moment (*tota simul*) which is represented in the immanent time of worldly things, is replaced in modernity (in fact, this very replacement is modernity) by a single plane of time that is at each moment producing an asymmetrical distinction between a past and a future.⁸ Risk, then, accompanies the perception that the future is the result of human intervention, rather than fate, chance, destiny or fortune. Risk is not a fact in the world. It is a relation to contingency as the open ground between present and future. There is risk because the present is itself the site of the active creation of future events which do not as yet exist. Risk presupposes a recognition of the temporalizing, intervallic and open nature of the present. Depending on our relation to decision making, though, the possibility of future loss is a 'risk' only for those who are in a position to make decisions and calculate loss, and thus to relate to the present as a site of creation and transformation. For the multitudes who are affected by decisions in which they do not participate, whose time is organized by forces over which they exercise little control, the ever present threat of future losses remains a 'danger', in other words, a contingency that emerges from forces outside the sphere of our control.

The decision making structures that create the organizational forms and time-schedules that structure life are increasingly abstracted from our life-worlds. And so, we adjust ourselves to temporal pressures and time-schedules which intrude upon everyday life and synchronize it with ever faster rhythms of production and exchange. We suffer new, properly temporal anxieties about the contemporaneity of our skills and ideas, the duration of friendships and commitments, the need to plan or the inability to plan. Cycles of investment speed up and, in turn, increase the tempo of resource depletion, of consumer trends, of the duration of work contracts and patterns of labor migration. And as more spheres of daily experience are sped up – by global market forces, tele-technologies and human resource departments – our manner of experiencing and expecting events is itself transformed. For, in the speed of economic exchange, and in the near instantaneous transmission of information, we begin to experience the present as little more than the means to the realization of an expected, future event which already appears to be real. In these cases, the interval – the median time between transmission

and reception, investment and return, or simply experience and expectation – is reduced to no more than a period of waiting that in itself possesses no creative or transformative force. The present becomes an obstacle whose duration restricts our access to a future event (the return on an investment, the reception of a message) that we desperately need to make real.

Prolepsis

In this way, instrumental reason's war on the middle produces what we might call a 'proleptic' time. Prolepsis is a rhetorical device in which one represents a future event or action as if it already existed, or were an accomplished fact. The speed of production and exchange in contemporary capitalism, or the elimination of the period between the transmission and reception of a message in 'real-time' tele-technologies, may be described as proleptic, because in each case actions taking place in the present proceed on the understanding that a second, future action is already secured, and that no intervening events will emerge in the interval between now and then and threaten its accomplishment. More importantly, the interval that fills the time between the present and the already determined future event is itself of no use. It is merely a means and thus not in itself of any immanent value.

Consider, for instance, the proleptic structure of capitalism. Capitalism generalizes the principle of exchange. Money is the 'universal whore', Marx says. It makes all things exchangeable, one for another. Exchange always consists of two distinct moments. In the first, present moment, I give to another some object, for which he or she promises to return an equivalent object in a second, future moment. The second moment then becomes the condition of the occurrence of the first. This being the case, the condition of a successful exchange – be it an exchange of energy, information or even libido – is that at the moment that the first act takes place, we guarantee that the second will occur as planned, so that we may already regard it as an accomplished fact. In exchange, we regard the future as if it were already present.⁹ This is why we may say that exchange has the form of a prolepsis: Our actions in the present take place on the understanding that no intervening event will take place between now and then, and so make things otherwise. The greater the span of time between what is given in the present, and what is required of the future, the greater the chance that an unexpected event will take place.

Capitalism is not simply exchange, though. It is exchange in the service of systematic accumulation. And because the drive for ceaseless accumulation takes place in the context of competition, there is set into

play a tension between the duration of time necessary for labor and resources to reproduce their value-bearing form, and the rate of capital turnover. As Teresa Brennan has shown, the acceleration of the circuit of exchange proceeds at the expense of the time necessary for the reproduction of value.¹⁰ So, for example, while chickens have to eat and grow, and wheat takes a season to mature, the acceleration of the turnover of capital depends upon its ability to speed up the rate at which these things can be made to enter the circuit of exchange and be converted into capital.

The history of capital may be seen as a series of different means of overtaking the speed of existing reproductive cycles, through either genetic and physiological manipulation or the rapid exhaustion of less-docile life forms. Cows, for example, have been allowed to maintain their natural physiological structure, but with the aid of genetic engineering and hormonal supplements, they are made to produce milk more rapidly and in greater volumes.

Some resources are less amenable to this kind of manipulation. Due to the still relatively wild nature of its environment, marine life is more difficult to control and manipulate. It has therefore proven more profitable to rapidly exhaust, in the short term, whatever mass of value can be extracted from marine resources. The recent near-extinction of North Atlantic cod off the coast of Newfoundland provides a good example. The reproductive capacities of codfish increase in proportion to their weight and size, so that an older, larger fish will lay proportionally more fish eggs than a younger, thinner one. The larger fish, however, are valued for the larger surfaces of flesh, which processors can manipulate in diverse ways. As a result, the trawlers and high-tech fishing equipment that set upon them in the 1950s prized the larger specimens and, in fishing these out, caused an exponential decrease in the spawning biomass of the species. Thus, the actualization of the immediate exchange value of their flesh was sped up at the cost of their future reproductive capacity as a species.¹¹

What makes a species 'economically viable' is our ability to alter and accelerate its reproductive capacities in order to control, and ultimately eliminate the interval between its present form of being, and its future exchange value. What these examples show is that it is not only exchange, but nature itself that gets organized in a proleptic structure. The complexity of nature, and the specific duration of natural beings are obstacles to the more speedy realization of capital.

Just as it speeds up the actualization of the flesh of codfish or pigs, so too does capital speed up labor. It purchases packets of empty time

that it fills with tasks. It calculates the derivation of profit from risk and futural speculation. Marx shows that in separating labor from the means of production, capital strands labor in the present, so that the laborer is unable, on his own, without the aid of capital, to reproduce his existence, or generate any kind of future. We are condemned to be linked and re-linked to an already unfolding sequence of events. The form of the movement of capital doubly enslaves the present. By the time the labor process ends, the new value I created, and with which I might put my laboring capacity to work, has already been converted into capital and directed into another, more complex phase of production, which is always a few steps ahead of my own present. Marx: 'the appropriation of ongoing labour has already at the same time appropriated future labour'.¹²

What I am to realize, and how I am to realize it: The moment of decision regarding these things has already taken place. In fact, in relation to those decisions, my own present is outdated. It is an anachronism. The time I expend in (or as) labor does not create any difference that 'makes a difference'. It does not create anything that had not already been planned and calculated. My own 'living present', the resonant interval in which I open a span of time is an instrument for the realization of events that are already decided upon and set into motion.

The so-called 'post-Fordist' trend toward flexible work schedules, contracting out, rapid reskilling and the more pervasive dismantling of the welfare state, all originate in the same basic conflict between the speed of capital, and the delays imposed by the unavoidable temporal costs of reproduction.

The same imperative to eliminate the interval organizes the production of knowledge and blurs the distinction between education and training. Consider, for example, the increasingly job-oriented university degree. When study is defined as a means to a higher salary, what is learned and the act of learning are not ends or goals in themselves. The quicker and more efficiently we can pass through the system, the better. Study – the actual act of becoming educated – is an obstacle that, paradoxically, prevents the realization of the second moment of the return on our investment.

The paradigm example of this new regime of speed, and the one we have not yet mentioned, is, of course, information technology, perhaps the most readily familiar symbol of the acceleration of modern life. The transmission of information at the speed of light effectively erases the interval between the transmission and reception of a message. Paul Virilio has suggested that with the development of speed-of-light

technology we have surpassed the epoch of 'extensive time in which the future was still laid out in substantial periods of weeks, months, years to come', and live now in an 'intensive' time, indeed an 'intensive eternity' produced by 'real time' communication which 'simultaneously contains both a bit of the present and a bit of the immediate future'.¹³

6

Distracted and Contemplative Time

How habits shrink time

Instrumental or, as I have been calling it, 'proleptic' time, is one way of organizing time's interval. We expect the future to be different from the present that appears before us now, and we regard the present as an obstacle to the realization of that second, future moment. The temporal organization of habit, as described by Bergson on the other hand, is based on a certain symmetry between the tenses. For this reason, the comparison between them can be instructive.

When we form habits, we select and record elements of past experience which continue to be useful, and with these we lay a claim on whatever might present itself in future.¹ Habit consists in the extension of some present and familiar state of affairs into a projected future. There is habit when it becomes difficult to imagine that events which have not yet happened will consist of anything qualitatively different from what is already at work in the present. This is, after all, what the etymology of habit tells us. Habit (*habere*) is to have, or to hold. What the future consists of, we already have. Bergson describes habit as a sensory motor schema which bleeds together the divisions among past, present and future to make of our experience a single extended motion. Tradition has this habitual structure. In what Marx described as the 'fixed, fast frozen relations' of tradition, the present converges with its interval to produce the sensation of an 'endless present' in which the future promises only what is already at work in the here and now. Whatever can be, already is. Whatever we might be, we already are. In habit, there is a general absence of a sense of temporal differentiation. In an 'Excursus on the Sense of Time', Thomas Mann describes habit as a falling asleep of time,

What is the cause of this slowing down that takes place when one does the same thing for too long a time? It is not so much physical or mental fatigue or exhaustion, for if that were the case, then complete rest would be the best restorative. It is rather something psychical. It means that the perception of time tends, through periods of unbroken uniformity, to fall away...great spaces of time passed in unbroken uniformity tend to shrink together in a way...when one day is like all the others, then they are all alike; complete uniformity would make the longest life seem short, and as though it had stolen away from us unawares. Habituation is a falling asleep or fatiguing of the sense of time.²

The perception of temporal differentiation is suppressed because habitual time 'shrinks' events into the space of a single moment, for which there appears to be no imminent end. The perception of an impending end is necessary to give a moment a 'tension' and 'pressure' that fills us with the sense of being on the way toward the unfamiliar and the unexpected. The recognition of an end reminds us that what we are experiencing is a period, a meanwhile, after which something else will present itself. Habit shields our experience from that sense of the foreign and unexpected and gives us what Althusser called 'despotic time, a time without duration'.³ Habit, we might say, places the whole of being in the familiarity of the present, so that time is not experienced as 'intervallic', as being in-between, and on the verge of a 'not-yet'.

The structure of habit is therefore opposed on each point to the structure of prolepsis. In proleptic time, we want to overstep the interval, to eliminate the meanwhile and more quickly actualize a future event that is, by all indications, different from the present. The present is then experienced as valueless because it is a period of waiting. How much of our time is spent today living through periods of useless waiting – in airports and taxis, in waiting rooms and line-ups? We pass dead time waiting for five o'clock to arrive, waiting to finish the gratuitous sentences of form letters and business calls, waiting for television commercials to finish (or fast-forwarding through the digitized version of them), for computer programs to load up or shut down, for electronic voices to complete the series of options that must be gotten through before we can act.

When we wait, Thomas Mann says, we 'consume whole spaces of time without our living them, or making any use of them as such' because we regard the present 'not as a boon, but as an obstruction... [thus] making

its actual contents null and void, by mentally overleaping them.' So, we may compare him who waits in expectation for the impending event to a greedy man, 'whose digestive apparatus works through quantities of food without converting it into anything of value or nourishment to his system.'⁴

We have then two very different ways of organizing time's interval. Habit merges the present and its interval. Prolepsis projects beyond the interval. In a habit, we are captivated by the immanent, intrinsic qualities of the one extended present. It is as though past and future were only dimensions of the one present. In habit, the symmetry and sameness of present and future stills the perception of impending change. In proleptic time, the present is of little value, because the impending future is expected to be qualitatively different from whatever it is that defines our present experience.

Distracted and contemplative time

These two structures of habitual and proleptic time roughly parallel the forms of aesthetic experience that Walter Benjamin calls 'contemplation' and 'distraction':

The painting invites the spectator to contemplation; before it the spectator can abandon himself to his associations. Before the movie frame he cannot do so. No sooner has his eye grasped a scene than it is already changed. It cannot be arrested.⁵

Benjamin does not set these out as alternate modes of perception that we might simply choose between. Rather, the emergence of the second, which he calls a 'distracted' mode of perception and which is the form of the perception that defines modern experience, emerges in the wake of contemplation.

Modernity is defined by the birth of a new 'perceptive apparatus', which allows us to make our way among objects that have been detached from the domain of tradition and have lost their 'aura', or the uniqueness and mystery that had previously underwritten their value. Contemporary experience takes the form of a 'shock effect': a constant sudden change which continually interrupts the principles of association with which we unite events. The nature of 'shock' is best realized in the quick, jarring cuts of the then newly developed technique of filmic montage. But, as Benjamin shows in his study of Baudelaire, distracted

perception pervades the whole of the experience of the subject of mass society:

technology has subjected the human sensorium to a complex kind of training. There came a day when a new and urgent need for stimuli was met by the film. In a film, perception in the form of shocks was established as a formal principle. That which determines the rhythm of production on a conveyer belt is the basis of the rhythm of reception in the film.⁶

The constant shock effect of modern living has changed the basic structures of human experience and perception. Can film, Benjamin wonders, help us develop the sensory apparatus necessary for navigating this new hyper kinetic world? It is precisely the film's 'mechanical' qualities that interest Benjamin. Mechanism here does not refer to the machine exactly, but to a specific organizational logic that rips events from an existing context and re-assembles them in some new order. Benjamin's diagnosis of mechanical media has gained such a wide currency because the tireless interruption of pattern, the breakdown of unity and the unending assailing of consciousness and the 'human sensorium' has only intensified, making these insights perhaps even more relevant now than when he wrote the essay in 1936.

In modernity, an ever accelerating rhythm speeds up the spheres of aesthetics, production and daily life, destroying the peaceful moment of contemplative absorption still available to the pre-modern subject, in the perception of the art-work, or the private moment of 'being alone with one's god'.⁷ The modern spectator is no longer offered that moment of religious or aesthetic abandon, because she is continuously assaulted – shocked – by new tactile sensations, 'the distracting element of which...is based on the changes of place and focus which periodically assail the spectator'.⁸ These direct her attention away from the phenomenon that is presenting itself in any given moment so that, like Thomas Mann's greedy man in waiting, she digests the present without converting it into anything of 'auratic' value.

There is an important affinity, then, between the 'distracted perception' of Benjamin's 'Art work' essay and the modern structure of 'empty, homogenous time' he criticizes in 'The Theses on the Philosophy of History'. Indeed, reading these essays against one another, we might say that empty, homogenous time produces a 'distracted temporality' that steers us away from the immanent possibilities of the present toward a projected future. In the *Theses*, Benjamin argues that bourgeois history,

or 'historicism' as he calls it, represents progress as an accelerated passage of humanity through a continuum of homogenous, self-contained and quantitatively differentiated present moments. In the famous words of the *Theses*: 'The concept of the historical progress of mankind cannot be sundered from the concept of its progression through an empty, homogenous time.'⁹

Modern, progressive time is empty because in it, the present is valued not for any of its intrinsic qualities, but as a means to a more rapid passage through a continuum of moments, each of which is the same (thus 'homogenous'), because it is merely an obstacle to the one that is to follow it. Any critique of modernity would have to take as its object not only the concrete goals of progress (e.g., the liberal state, classless society, liberated sexuality), but the very structure of the time in which these goals are promised. It is in order to 'blast open the continuum of time' that is structured as a prolepsis, that Benjamin 'enlists the services of theology' and sets out after 'a conception of the present as the "time of the now"'. Benjamin's cryptic descriptions of 'now-time' are well known: 'a present which is not a transition, but in which time stands still'; 'a Messianic cessation of happening'; 'not a transition', but an 'arrest' of time.¹⁰

It is difficult to know what exactly we should take from these descriptions of Messianic time. But it is clear that it is not a return to some more real, or 'auratic' time. In fact, in the change from a contemplative to a distracted temporality, all prior notions of value and worth become problematic, and the very notion of 'value' is placed in suspense. In the end, Benjamin shares Bergson's view that the analytical fragmentation of traditional structures of perception and time ultimately makes possible a deeper and fuller sense of the intervallic nature of things.

Many scholars have shown how the notion of now-time is rooted in Jewish mysticism, or more recently in the messianic Christianity of St. Paul. But we should not overlook how deeply it is implicated in the Bergsonian critique of modernity. In his essay on Baudealaire's *Paris*, Benjamin makes frequent references to the Bergsonian theory of time. He does not disagree with Bergson's metaphysics but criticizes him for rooting his philosophy in the interior insights of a poet. Benjamin's problem with Bergson, it seems, is not with the conceptual distinction he makes but with the kinds of experience he draws on to bring these ideas to life. Like Deleuze, Benjamin believes that Bergson himself does not understand the significance of his own philosophy and, more to the point, that he fails to understand its contemporary relevance for all the new developments emerging around him, most notably cinema.

In other words, where Bergson develops his complimentary science by seeking out the conditions of science and evolution, Benjamin does something similar with the experiences of emergency and shock.

Emergency

Because it attempts the impossible task of eliminating the interval, empty, homogenous time cannot help but produce a sense of crisis or emergency. If the future is already decided upon and waiting to be actualized, then the time between now and then appears threatening because it may give rise to contingencies that interfere with the realization of our plans. We have to nurse our schemas through the minefield of the middle. What the future will be depends on decisions we make now. In a fully secular world, these decisions have to be made without the time necessary to gather all the relevant information. And the faster the decision, the less perfect the information with which it can be made. This situation is further intensified by the fact that, as more is attributed to human decision making, the world system becomes increasingly complex, the range of possible action increases, and the information necessary to make a decision multiplies. Proleptic time cannot be separated from a sense of emergency, because it requires us to remain on guard, ready to neutralize whatever contingency might emerge in the meantime.

In spite of the anxiety or terror it produces, 'emergency' always also makes us aware of the ineradicable contingency of life. Emergency implicitly acknowledges alternative futures which must be prevented in order for the desired outcome, and not some other, to come about. In the emergency, we are compelled to act now in order to ensure the arrival of some possibilities, and to prevent others. There is emergency because the future is not given, but must be made. And if that is true, then the interval in which we find ourselves is not an obstacle but must also be the means of whatever can and will emerge from that point. If there are different possible outcomes, then the willful attempt to screen out some in the name of one particular course of action is a political act, or a 'forcing' of some possibilities through a dangerous middle ground, and a neutralization of others.

Benjamin's critique of the empty time of modernity is not meant to valorize some bucolic, pre-modern concept of being but to engage more fully with the structure of time that now becomes 'thinkable', and this is where his thought converges in important ways with Bergson's. What Benjamin does not seem to appreciate, or what I will try to point

out, anyway, is how very close he often is to Bergson in his approach to mechanical media and time. The 'empty, homogenous time' that Benjamin locates at the basis of bourgeois society shares an important relation with the scientific quantification of time that, for Bergson, renders events into 'any instants whatever'. More importantly, though, Benjamin and Bergson see the emptying out and mechanization of time as the precondition for some insight into a decidedly non-mechanical dimension of experience that Benjamin calls 'shock' and Bergson calls the 'radiancy' or 'vibration' of time. For both Benjamin and Bergson, mechanization rips apart the syntheses that joins elements in a sequence and, as it does, it offers us new ways of thinking about the connective tissue that holds time together. For Benjamin, this dialectical ambiguity of empty, homogenous time is clearest in the dualistic nature of shock.

Shock

Earlier, we said that the painting invites us into a contemplative state, which Benjamin compares to a moment of 'being alone with God'. Shock, it would seem, is defined by a lack of contemplation. We cannot take in one moment before another has come along. That might leave us with the impression that shock is simply a function of the limited duration of sense impressions: Because it accelerates the rate at which we receive these, we never have time to fixedly contemplate what is there before us. More importantly, shock seems to be defined by its capacity to prevent some more real and authentic experience of an event that we might have, if we simply had adequate time to ponder over it.

We find this version of shock as brief duration and as obstacle to full perception in Fredric Jameson's well-known passages on the 'schizophrenic consciousness' of late capitalism. To illustrate the way that we are affected by the sudden disconnected bursts of sensation, Jameson compares the subject of late capitalism to a schizophrenic who cannot appreciate the longer continua of time which makes the present possible. He took as his model the striking image of a schizophrenic girl who suddenly finds herself cut off from the world. Radically alone, she stares dumbfounded at a group of schoolchildren signing. She cannot fit this image into any larger pattern of meaning: 'It was as though the school and the children were set apart from the rest of the world.'¹¹ Jameson suggests that the average citizen of consumer society who selects and circulates disembodied signs is similarly unable to hold together any unified experience, and so is restricted to the 'schizophrenic' use of isolated, flat signifiers. So, unable to connect up past and future, we live in what he calls a 'perpetual present', cut off from history and,

ultimately, from an understanding of the mode of production that places one there.

In this formulation, shock is still defined negatively, i.e., by what it is not: It is not contemplation. It is not being alone with one's god. But Benjamin's interest is in the dialectical ambiguity of the shock effect, and so we must pay attention not only to the negative description of how mechanism breaks down tradition and continuity, but also to the positive moment that celebrates new kinds of human perception and new insights into the human condition that are made possible precisely by the industrialization of experience, and the break-up of the long continuous *durée* of a previous era.

In fact, shock is defined not only by the quantity of duration it lacks, but also by a certain phenomenological quality it possesses. To be more precise, shock opens up an interval between two different temporal orders that Benjamin calls long and immediate experience, or simply diachrony and synchrony. Shock is not in either of these registers of time but is the point of articulation between them. For this reason, it mirrors many of the qualities of what Bergson calls 'passing', or 'the past in general', which we shall turn to shortly.

On the one hand, mass reproduction and distribution destroys the sense of originality in art works, by subjecting them to the general equivalence of the commodity system. As exchange value, the 'universal whore', subsumes an object or event, it flattens it out onto a single plane of equivalence, where it loses its own uniqueness and gains value purely through its association with other comparable things. Georg Simmel shows how this produces a blasé attitude, which ends in a lack of concern with the particularities of any given thing.¹² A general feeling of indifference falls over life as fragments alienated from their context are placed in association with other, equally estranged elements, or 'any-moments-whatever'. To leave it at that, we might be led to believe that the point of Benjamin's critique is to valorize an older, auratic structure of time. But Benjamin is not interested in returning to what was. He wants to see what emerges after we pass through the frozen wasteland of abstraction, or, in this case, the general exchangeability of images.

Shock offers us some insight into this new quality of human experience because, while it accompanies mechanism, the shock effect itself is not mechanical. Shock has a dichotomous nature – it breaks down some older order, but at the same time also opens up new capacities for reflection and thought.

By the time that Benjamin reworks it, shock already has a long and dialectally ambiguous career. Jeffery Schnapp has shown how the

Baudelarian notion of shock as aesthetic epiphany has its roots in older eighteenth-century notions of the sublime, where it describes both trauma and ecstasy. Shock is intimately tied to the industrialization of experience. It is always an ambiguous, two-sided affair. On the one hand, shock is a medical and psychological injury resulting from the breakdown of mechanical devices, or simply from the speed of experience. In this sense, shock is a new kind of 'pathogenic wound', caused by the speed and complexity of modern machinery. Schnapp traces the evolution of the idea of shock 'pathogenic wound' to 'regenerative thrill'.¹³ In its early modern formulations, shock is associated with massive impact to either the body or the nervous system. Railway spine, for instance, is a condition of invisible damage to the system caused by the new excessive speed of the railway coach.¹⁴ Freud then picks up this notion of shock as trauma and develops an analogous diagnosis of psychic shock which he traces back to the shock of war, and from there to a much more surprising etiology in imbalance of libido caused by, among other things, seminal leakage, masturbation and coitus interruptus. In these cases, the emphasis is on injury and the blockage of experience that would otherwise be available, were it not for the wound caused by speed and industrialism.

Schnapp explains how train crashes, boiler explosions, crowded train quarters and the trauma of transportation produce a whole new iconography of shocks to the system. Benjamin's use of shock continues this theme of general sensory trauma, the breakdown of routine, tradition and continuity. And this idea of shock as trauma continues on into our own time with the shock and awe of Donald Rumsfeld and George W. Bush, and the return of shock as psychological therapy and interrogation technique. Naomi Klein, in her book *The Shock Doctrine*, draws the connection between these two, showing how the shock therapy of 1980s style IMF policy is directly linked to the use of shock as a device to break down the most elementary sense of being a person.¹⁵ But even here, when it is used to break down what a person is, it is in order to reconstruct them in some new form.

So, shock destroys, but it is also the condition for re-creation in some new form. Here is where its trajectory may be traced from the eighteenth-century sublime. Shock opens up some dimension of human experience that would not have been possible or available without the intensive breakdown. The ecstasy of art, drugs, moving images and speed are about not only what they break down, but also what they open up. Schnapp explains that 'irrespective of where they are found, shocks figure as engines of bliss: as orgasm, rapturous play, release from

the constraints of analytical reason, regression to states of infantile narcissism or pre-Oedipal boundarylessness. Rather than paralyzing or blocking, rather than needing to be parried by a defensively formed subject, they sunder bonds to the past and, in their place, forge new links: links between men, machines and their environment; links that extend the individual's physical and mental reach.¹⁶

Thus, when Baudelaire takes over the notion and uses it to explain the phenomenology of urban living, it already carries this ambiguity as being simultaneously the best and worst thing that has happened to us – thrill and wound.

We can now be more precise about the temporal qualities of shock: It emerges in situations of what we could call 'non-synchronicity', when events from one order appear out of context in another. We are still operating on the basis of some past schema of action and set of expectations, when a new reality has been thrust upon us. Or, just when we had adjusted ourselves to a new reality, an archaic element from the past appears in a context that no longer supports it. Freud develops key psychoanalytic notions on the same principle. In the return of the repressed, or the fantasy of the primal scene, an old traumatic element from some other time interferes in the smooth functioning of this one. Filmic montage is the paradigm experience of shock, because it gives us the ability to recreate an object outside of its original conditions of emergence. The shock effect always involves some incongruous overlapping of two different temporal layers.

With this in mind, we can better appreciate what is at stake in the distinction between the shock effect and the aura that Benjamin associates with pre-modern art and its perception. The auratic object carries with it 'all that is transmissible from its beginning',¹⁷ or, in other words, the cultural totality of which it is part. We might note that the etymology of tradition conveys this sense of carrying along, or bearing. What is carried along is not only the particular object, ballad or painting, but the whole of the context in which it appears. Here is where we must locate the 'modernity' of shock. In a traditional structure of time, the aesthetic object conveys the cultural totality of which it is part, and which is inseparable from it. This means that it is difficult to distinguish between the way culture transmits and what it transmits. Part and whole are seamlessly linked together by a mechanism of transmission that remains hidden. Each object presents the entire system of beliefs that found expression in it. Tradition, as we said earlier, is based on a symmetry among the tenses – what was is. That is why, in traditional societies, the storehouse of culture is not yet seen as a set of treasures,

available for contemplation here in the present, and existing independently of the means of its transmission. In tradition, the means of presentation cannot be separated from the actual occurrence of a thing.

In a world of mechanical reproduction, on the other hand, objects are disembedded from their original contexts. Giorgio Agamben explains that shock carries into the present something of the 'violence' through which an element is divorced from its original context.¹⁸ The shock is not a property of the old order or the new. Instead, it is the perceptual recognition of the interval the shocking thing occupies as it moves from a present present to a past present. Now, because it concerns this in-between interval, it has an important relation with the Bergsonian concept of the past in general which, as we will see, also describes this intervallic space of transmission. And the decisive question that will separate Bergson and Benjamin is whether this insight into the nature of intervals is only available under certain historical and social conditions (i.e., modernity) or whether it is some transhistorical, or even ahistorical, experience available to the introspective poet, no matter what the wider conditions in which they live.

Agamben explains that for Baudelaire, shock is a quality that events possess when they are no longer able to transmit the order in which they first appeared:

The shock is the jolt of power acquired by things when they lose their transmissibility and their comprehensibility within a given cultural order.¹⁹

And, more specifically:

Baudelaire understood that for art to survive the ruin of tradition, the artist had to attempt to reproduce in his work that very destruction of transmissibility that was the origin of the experience of shock: in this way he would exceed in turning the work into the very vehicle of the intransmissible. Through the theorization of the beautiful as instantaneous and elusive epiphany, Baudelaire made of aesthetic beauty the cipher of the impossibility of transmission.²⁰

Intransmissibility is the quality a thing possesses when it has been disembedded from one sequence, and before it has been re-embedded in another. At that point, the object is separated from any practical, utilitarian purpose. And, in Baudelaire's aesthetic, this work of separation seems to be one of the preconditions for its transformation into a

thing of beauty. We have the thing without the explanatory context, meaning or purpose that had accompanied it. This suspension of immediate utility allows an object to convey something more general or formal about its way of being in the world. The idea here is very close to McLuhan's thesis, that when a medium is in effect, its media-specific qualities are invisible to its users. It is only when a print, photograph or any medium at all is obsolesced that we are made aware of its mediating properties.

We might distinguish between two different processes at work here: 1) shock separates us from the past. It produces an asymmetrical rupture between what had been and what is. But 2) shock is also a moment of insight and epiphany. It is precisely because it severs the present from the continuum of time, and unstitches past and future, that it provokes in us some new relation to time as such.

So, when Benjamin claims that 'The concept of the historical progress of mankind cannot be sundered from the concept of its progression through an empty, homogenous time,'²¹ we should not forget that it is also in this environment that it first becomes possible to 'blast open' the continuum of time and experience it in some new way, that is to say, as something other than either an auratic, unbroken continuity, or set of discontinuous, fragmentary instants.

Immediacy

It may be easier to appreciate what Benjamin is trying to achieve in a theory of time here by turning our attention to the *Arcades Project*, where he attempts to overcome the dialectic of long and immediate experience. And in this other approach to thinking the present as 'now-time', we find a common denominator that links Benjamin and Bergson: they both wish escape the dialectic of synchrony and diachrony and get into the interval that links these two structures of time.

What Bergson overlooks, according to Benjamin, is that empty time is 'bourgeois'. As Claire Blencowe has pointed out, 'Benjamin, in effect, seeks to historicize Bergson's *durée*. His first move is to insist upon the historical specificity of the structures of experience to which Bergson's philosophy bears witness. It is the inhospitable blinding age of big-scale industrialism from which [Bergson's] own philosophy evolved, or rather, in reaction to which it arose.'²² Empty, bourgeois time cannot be understood apart from the historical movement in which capitalism breaks up an older, longer *durée* of feudalism into a series immediate and discontinuous 'empty instants'.

Bourgeois society is based on an experience of immediacy. We are (over-) familiar with the complaint that capitalism renders the crowd into a set of isolated individuals with individual concerns. What is less often pointed out, though, is that the structural condition of this alienation of the worker from himself and his class is the separation of the daily moments of production from the longer cycles of reproduction that make them possible. The immediacy of wage labor stands in dialectical opposition to the longstanding social obligations of feudal, idyllic patriarchal relations with, as Marx put it, 'their train of ancient and venerable tradition'.²³ The wage laborer is unable to connect his immediate present to a collective one and, more importantly, unable to connect it to the long train of labor skill and capital that he and the rest of his class have produced.

Idleness

Marx captures this complex situation in a deceptively simple formula when he says that political economy begins from 'a fictitious primordial condition'.²⁴ What he means is that the supposed freedom of the free market is based on an artificial isolation of the moment of exchange from the wider context that makes it possible. In free market economics, what precedes and follows the moment of exchange has no bearing on the present in which that exchange occurs. How it is that people come to be available for work, and what becomes of them after are not its concerns. Each quarter, month or pay period, the economic cycle appears to start all over again, hence fictitious primordial condition. The 'primordial' condition is possible only because it has been decontextualized and separated from the longer historical trajectory that precedes and follows it. The structure of capitalism prevents us from accumulating the results of our past efforts and using them to place a claim on the future. Because it is locked into this structure of time where it has to forever start over again, labor is always returned to the position in which it began, and that is why there is always a class with nothing but their labor to sell, and nothing but the present to claim.

Our first thought, then, might be to create a simple dichotomy in which feudalism and capitalism can be crudely distinguished by the long and immediate time on which they rest. But on further reflection, we can note a strange affinity between the perpetual present produced by capitalism and the eternal now of the feudal time it destroys. In place of the one long, self-contained stretch of feudal time, capitalism gives us a series of isolated and self-contained moments, each apparently

independent of the other.²⁵ The duration of these moments differs, but the basic structure of self-containment and unity does not.

In fact, on closer inspection, we recognize here another variation on the story of modernity as a battle between the one and the many, or the continuum and the instant that we encountered earlier in the history of the plane and the image of thought. A single, pre-modern principle of unity – the eternal now of God's mind, the despotic feudal, long *durée* – is broken up by the asymmetrical, forward-looking time of capitalism which gives us a series of moments, all disconnected from one another – each one a seemingly original state of affairs. But let us recall the basic principle of the Deleuzian/Bergsonian critique of Humean empiricism and Renaissance perspective which we examined earlier. What we found then was that the radically separate and decontextualized moments of immediacy that usher in philosophical and aesthetic modernity, fail to realize their revolutionary promise because they maintain the very principle of unity from which they try to break free. Without an analysis of the medium in which immediate instants work together to produce a cumulative effect, we cannot help but to fall back on an older image of time as a static and accomplished fact. It is the very same problem that we now find in Benjamin's meditations on immediacy.

To avoid this dialectical dead end of long vs. immediate time, Benjamin turns his attention to those forms of social life in which these two structures of time overlap and get mixed up in one another. The lives of the flaneur, the gambler and the idler all show us how 'long experience is translated into the language of immediate experience' and by seeing how these structures of time get implicated in one another, we learn something about the medium in which they communicate.²⁶

This play of the long and the immediate is clearest in the passages on idleness. Some of the most intriguing passages in the *Arcades Project* concern 'idleness' as an experience of time that falls somewhere between synchrony and diachrony. This may seem like an odd term because, in the sense that Benjamin uses it, idleness has nothing to do with inactivity but rather with a relation to the present that, at one point, he describes as 'preparedness'.²⁷ Instead of laziness, we might think of a motor idling, maintaining its present state and ready to be mobilized for some new activity. Or, for a more pre-mechanical reference, we might think of Baudelaire's description of boats idling at their moorings. Benjamin develops this sense of preparedness by contrasting it with a series of very interesting temporal structures that include amusement, leisure, entertainment and most strangely, perhaps, hunting.

It is easy to suppose that, in his passages on hunting, Benjamin is looking for something archaic in the most modern of experience. The larger, more significant point, however, is that in following the lure, the hunter finds himself in between the long and the immediate, the diachronic and the synchronous.

Hunting

The skill of hunting, after all, lies in a particular kind of waiting. The hunter recognizes patterns and structures in the landscape to which others remain blind. Because he sees complexity and organization where we see only a swath of green or a stretch of water, the hunter is able to recognize the important differences that lead him to the rustle of a moose in the bushes or a bird taking flight. Hunting is a dialectic of waiting and its sudden interruption by an instant – an immediacy – that requires one to act, to pounce, to pull, to jig or to reel.

The hunter's anticipatory stance unites a long stretch of preparatory time with a sudden intensive instant that ruptures the continuum. Hunting itself is neither the waiting nor the pounce, but the in-between state that connects them. All his preparations may come to nothing, but if the hunter is successful, it is because he knows where the animal is likely to be found, when it drinks and what it eats. The appearance of the prey is a difference that is not calculable in advance but is available only if we know how to prepare for it. The point is not that the waiting makes the future predictable but that the hunt itself is this state between preparation and the shot.

The analogies with the Messianic in Benjamin should be obvious. He says, for instance, that all we can do is prepare for the Messiah and that in Messianic redemption the world will be the same, only ever so slightly different – in other words, its difference will be recognizable only in its contrast to some existing, recognizable state of the world. The hunter, in a similar way, waits for the long continuum to be broken by the sudden instant. He belongs to neither of these structures of time but is the point of articulation that unites them.

Benjamin explains that 'Whoever follows traces must not only pay attention; above all, he must have given heed already to a great many things. (The hunter must know about the hoof of the animal whose trail he is on; he must know the hour when that animal goes to drink; he must know the course of the river to which it turns, and the location of the ford by which he himself can get across.) In this way there comes into play the peculiar configuration by dint of which

long experience appears translated into the language of immediate experience.¹²⁸

In modernity, hunting finds its modern correlate in the Flaneur's 'idleness' as he strolls among the boulevards in a state of idle, impractical, or non-instrumental engagement with all the frenetic activity taking place around him. Should we not also add now the cop on stake-out, the prowling paparazzo, the night watchman, the airport luggage scanner, the amateur astronomer, the streetwalker and the web surfer, all of whom have had to learn to recognize how the present reveals its novelty and difference only by throwing itself up against a long continuum of regularity.

Idleness in this sense differs from the more vacuous forms of adventure and amusement which instead concern an experience of immediacy that appears to have no connection to the moments that prepare and follow it.

The same sense of disconnected immediacy gives consumerism its false promise of satisfaction. The utopian lure of the market lies in its promise to take the waiting out of wanting and give us the object of desire without any preparatory work. In this way, amusement, entertainment and all the cognate forms of adventure have the same relation to the present as waged work: they offer moments separated from the means that produce them, in other words, from the long *durée* from which they emerge, and from the effects on the future that they in turn produce. For all these reasons, amusement is something different from what Benjamin calls 'idleness': 'The idler does not tire as quickly as the man who amuses himself.'¹²⁹ The problem with adventure is not (or not only) the ideologically charged content that usually fills it up, e.g., the Disneyfied, simulacra version of America or the biotechnical wizardry of the miracle diet. No matter what the content, adventure promises us a certain experience of an instant that frees us from what precedes and follows it – a fictitious, primordial state of affairs.

Adventure, in the sense that Benjamin uses it, is an intentional effort to make the present render a separate, discontinuous instant that has seemingly no relation to the moments that precede and follow it. The hunter's idle stance, on the other hand, 'is no longer tied to the expectation of adventure because he who undergoes an experience can follow the trace that leads there.'¹³⁰ In other words, the trace, or the lure, unites the long and immediate, whereas adventure tries to escape it.

'Idleness', then, is a kind of preparation for what newness might emerge from the present. Benjamin finds a very similar structure at work in the life of the student, the gambler and the flaneur. Scholia, or

scholarship, required a deep immersion in a topic coupled with a very precise kind of distance.³¹ The student hunts for traces in the book. He pursues moments of epiphany that light up the manuscript. These are only available, however if, like the hunter, he knows how to prepare for it. In the same way, the gambler seeks out a pattern in the play of cards, or the roll of the wheel, only to better prepare for its alteration in the roll of the dice. And if the flaneur is attuned to the ephemera of the city, it is only because on his regular stroll, his blending back into the crowd lets him appreciate the smallest novelty that emerges in contrast to the cityscape with which he has become familiar.

Consider, then, how idleness in this sense differs from pleasure and leisure. Leisure is an older, feudal/aristocratic way of consuming time that is intimately connected to religion and court life and the kind of social functions and stations they suppose. Leisure, in other words, has a certain kind of purposiveness about it, but it is a purpose that belongs to a world we no longer occupy. In modernity, leisure therefore becomes associated with a backward longing for a world we have lost and the aristocratic privilege that attaches to it.

Idleness, on the other hand, has no prescribed social function. It is instead a certain disposition to any moment. At one point, Benjamin refers to it as 'work preparedness' – the capacity for any present moment to prepare the conditions for another one to follow it. Preparedness is precisely what capitalism discounts and will not pay for when it externalizes the costs of reproduction and makes labor dependent on the store house of capital which workers have produced, but to which they have no claim. So, if capitalism is able to produce an empty homogeneous time, it is because of the way that it manages this moment of preparedness, and divorces it from the longer cycle of reproduction that makes it possible.

7

Empty, Homogenous Time/ Any-Moment-Whatever

It is in order to understand these complex relations of the long and the immediate that Benjamin turns to Bergson. This should not surprise us. For few thinkers have pursued this duplicitous nature of time with the intensity and descriptive powers of Bergson. His whole philosophical enterprise is built around the consideration of how time presents itself in these two different orders – a series of separate presents vs. a long continuum, or discrete vs. continuous multiplicities.

To appreciate the affinities between Bergson and Benjamin, then, we first have to get beyond the common misperception that Bergson is an ahistorical thinker, or that he arrives at psychological, interior concept of time. In fact, what we find is that Bergson's thought changes, from the early studies in duration to the more developed concepts of the 'past in general' and *Creative Evolution*. Bergson moves away from a model of internal time-consciousness to a more metaphysical interest in the structures of time in which a subject occurs. The thesis of this work is that 'time is not in us, we are in time', as Deleuze nicely summarizes.¹

Just as Benjamin is interested in new kinds of human experience that might emerge in the empty homogenous time of bourgeois society, so is Bergson interested in what metaphysical opportunities are opened up by scientific/mechanical time.

In spite of the enormous differences between them, Benjamin and Bergson set out from similar concerns about the fragmentation of time in modernity. And instead of choosing between them, I believe we can learn more in trying to understand the common horizon they reach toward. We can best appreciate their commonalities by asking what unites the 'empty, homogenous time' of bourgeois society with the 'any-moments-whatever' of the scientific revolution toward which Bergson turns his critical gaze.

The critique of the fragmented time of modernity might lead us to try to reclaim the older, longer stretches of time as Julia Kristeva does, for example, when she tries to distinguish between men's and women's time and to show that feminine time is based on longer cycles of duration.² Or, we might wish to revel in the frenzy of the mechanical world and embrace the frenetic speed of industrialization, as Marinetti and the Futurists do when they ask us to bow down to the straight line that annihilates the zigzags and arabesques of nature.³ Benjamin and Bergson attempt something more interesting: They try to avoid the simple opposition of time seen as either a set of discontinuous instants or a single continuum, and instead bring the analysis back to the 'interval' in which synchrony and diachrony find their common ground. To pursue these affinities in Bergson and Benjamin's programs, we first have to see past the caricature of Bergson as a thinker of interiority and psychology and recognize him as a writer concerned with the rise of mechanical life, and the metaphysical consequences of its analytical work of decomposing unity into atomic elements.

Time as point and continuum: Heidegger's critique of Bergson

It is true that Bergson's initial theory of time rested on a basic antagonism between authentic duration where the ego lets itself live, and an unauthentic 'spatialized' time that is imposed on it by the external forces of language and mathematics. The simple truth of these ideas, presented in his beautiful prose and striking analogies, made his work readily intelligible and made Bergson immensely popular. He was, in fact, the most famous intellectual of his time. At the same time though, the simplicity of this opposition made him an easy object of ridicule. Benjamin was not the only one to distrust the hazy memories of old forms of *erfahrung*. Wyndham Lewis in his acerbic, conservative wit said:

As much as he enjoys the sight of things 'penetrating' and 'merging' do we enjoy the opposite picture of them standing apart – the wind blowing between them, and the air circulating freely in and out of them.⁴

Heidegger, on the other hand, took Bergson more seriously. He did not simply turn Bergson's system upside down, as Lewis did. He situated Bergson in the history of the philosophy of time and tried to show why his ideas emerged when they did. Heidegger had a very important and complex relation to Bergson. In fact, he credited Bergson with achieving the most rigorous analysis of time we possess, surpassing even that of his teacher, Husserl. Heidegger recognized an existential and political urgency

in Bergson's theory of time. Nevertheless, he thought that Bergson's efforts were limited because they relied on a dualistic vision of time. For Bergson, time was either a series of static 'now-points', or it was a fluid, undifferentiated continuum.⁵ Heidegger's critique of Bergson helps us appreciate the wider, metaphysical significance of the concern with the long and the immediate, the continuum and the point that unites Bergson and Benjamin. Heidegger shows us that the dialectic of point and continuum that Bergson and Benjamin find at the origin of modern industrial life has deeper roots that stretched back at least to the Greeks.

In his lectures at Marburg in 1927, Heidegger showed that Aristotle had already made a similar distinction between periodic and transitional aspects of 'the now'. When Aristotle asked what part of time is in being, he had already determined the meaning of being on the basis of a certain pre-comprehension of time: 'In being' means being present. He then assigned everything transitional and therefore not present, to 'non-being'. All that Bergson proposed was to overturn Aristotle's opposition and say that time is a pure transitional flow that is artificially broken up and spatialized by language and social life. Heidegger recognized in Bergson the very same shortcoming he would later identify in Nietzsche: because he was satisfied simply to overturn the basic distinctions and hierarchies of ancient philosophy, he did not see fit to ask about the origin of the oppositions themselves. As a result, Bergson's immensely popular and influential notion of time as flux and *élan vital* threatened to block the way to a real understanding of time, and a confrontation with nihilism and what Heidegger called 'fugitive time'.⁶

We might summarize Heidegger's critique of Bergson in a more contemporary language by saying that, from Aristotle to Bergson, the philosophy of time is structured by the logic of what Jacques Derrida has called 'supplementarity'.

A supplement is a surplus added to something that is whole and complete unto itself. The supplement 'adds only to replace'.... It intervenes or instates itself in-the-place-of...the supplement is an adjunct, a subaltern instance which takes- (the) place [tient-lieu] supposed to be original and self-sufficient.⁷

The supplement is not a constitutive part but remains foreign and secondary. The fact that a supplement must be added to something indicates a lack or absence of completeness in the original.

For the early Bergson, language and social life supplement duration and provide it with an external means of representation that gradually replaces the self. For Aristotle, the now's references to past and future are

supplements, and time can only be (an extant thing in the present), if it is not what it is (a transitory changing thing, some of which is not yet, some of which is no longer).⁸ From Aristotle to Bergson, the confusion of being and presence produces variations on one and the same question: Is it the point or the continuum, the numbered number, or the numbering number, solid or liquid, rest or motion, which is original and has a claim to being? Bergsonism was not radical enough for Heidegger because it did not ask about the origin of these divisions. Before we decide which parts of time will carry a negative or positive value, which is real and which a supplement, we need to ask why time appears to be divided into actual and chimerical parts, why it is at once real and phantasmatic, and whether there is a whole in which point and continuum are united. As we shall see, Bergson himself becomes profoundly aware of the limits of his early dualisms. His later work is an attempt to move beyond it toward some more satisfying account of time.

Heidegger's analysis, however, like Benjamin's, is limited to Bergson's early work. He does not address the later work on memory and science, where Bergson places all these easy oppositions into question. This is unfortunate, since in his later work Bergson passes beyond the limits of these early dichotomies and, instead of choosing between point and continuum, takes up the very problem that Heidegger identifies: How is it that time can appear in this dual mode? How can it be at once point and continuum, synchrony and diachrony, anticipation and pounce? What, to be more Agambenian about it, is the machine that produces the difference between them?

Bergson's evolution

Should we be surprised that, like any good Bergsonian, Bergson changed over time? It is true that he initially concerned himself with a distinction between static segments of movement that make up the exterior world, and a more authentic, unadulterated duration we experience when the ego lets itself live. In *Time and Free Will*, he summarizes his thesis this way:

within our ego there is succession without mutual externality, outside our ego mutual externality without succession.⁹

In the early 1940s, as Bergson's star faded in the bright light of existentialism, Jean Hyppolite tried to counter an emerging caricature of Bergson as a psychological thinker. Hyppolite distinguished between an

early and late Bergson. *Time and Free Will*, he argued, separates *durée* and space in a manner resembling Descartes' separation of body and soul. It is true that the spiritual questions it asked remained psychological and at the level of an internal time-consciousness. But *Matter and Memory*, Hyppolite suggests, is an exercise in ontology that reaches far beyond the psychological domain of *Time and Free Will*. Bergson recognized that we live in the world and are embodied. And so, the problem of incarnation, of 'the insertion of the I in material being', is the new subject matter of *Matter and Memory*.¹⁰

Gilles Deleuze also recognizes this break in Bergson's work. He writes:

Bergsonism has often been reduced to the following idea: duration is subjective, and constitutes our internal life. And it is true that Bergson had to express himself in this way at least at the outset. But increasingly, he came to say something quite different: the only subjectivity is time, non-chronological time grasped in its foundation, and it is we who are internal to time, and not the other way around.¹¹

Like his teacher, Jean Hyppolite, Deleuze finds the early oppositions of juxtaposition/succession and point/continuum replaced by a new, deeper concern with the encounter and co-existence of these two realms, and ultimately with the nature of the whole in which these participate. Deleuze also recognizes that this latter image of time as 'the open' shares profound similarities with Heidegger's vision of time. He writes:

The only resemblance between Bergson and Heidegger – and it is a considerable one – lies here; both base the specificity of time on a conception of the open.¹²

This evolution in Bergson's thought begins with *Matter and Memory*. As Bergson's close friend Paul Valéry mentions in one of his diaries: 'Bergson told me yesterday that he wiped the slate clean in 1890 and began his system by studying memory.'¹³

Bergson's 'turn' away from internal time-consciousness begins with his new investigations of memory. What interests him is not exactly the contents of any memory, but questions concerning the ontological status of things that exist in the past.

We usually imagine memory to be the recollection of events that are no longer present. In memory, an image from the past co-exists along with a present perception. But you do not have to push the analysis very far to find that memory must be more than simple

recollection. In memory, images from different former presents enter into relations (e.g., of association and resemblance) with a new, present perception.

In any memory, one present image evokes another past one, with which it becomes associated. But apart from the contents of what is associated, memory requires a capacity to reorganize tensed events into new structures. Bergson's great insight about memory is that this capacity to re-associate cannot itself be derived from the properties of the things that are associated. Memory 'per se' is not itself a remembered event. It is an operation that connects presents and establishes new patterns of diachrony and resemblance among them. Memory is not derived from any present. It is rather something that happens to presents and allows them to be organized into new and different structures of movement and action.

Deleuze finds in this distinction between memory 'de jure' and memory 'de facto' a way around the confusion of being and being-present in which, Heidegger believed, all of Bergson's work remains trapped. Bergson's work on memory takes him outside the bounds of presence and gets him into the interval between instants.

Initially, this begins as an investigation of a basic, fundamental problem of the 'presentism' in our understanding of memory. So long as we conceive of memory as merely recollection, our analysis remains centered on presents, be they past presents or present presents, and not yet on the process of their organization. The past that we recollect is more or less present, and so it must borrow its actuality and life-blood from the new present, i.e., the one in relation to which it is past. What Bergson wishes to show is that the present centeredness of that analysis 'throws no light on the mechanism of association which unifies the different presents.'¹⁴

The paradox of the present: how does it pass?

To get at the connective tissue of memory, Bergson introduces his new concept of the past in general. It describes the whole in which different 'presents' of memory participate. The new concept complicates the simpler image of time introduced in *Time and Free Will*. Most importantly, for our purposes, it places in question any simple opposition of synchrony and diachrony. In Bergson's early work, experience is temporal because the present is not a discrete entity, but a 'nexus' and a 'continuum' that contains intrinsic references to a past and a future.

The habitual present can be contracted into a fractile of an instant, or it can be infinitely expanded to include the whole long duration of some

evolutionary process, such as the movement of glass or the decomposition of the sun. Bergson describes these sorts of habits as 'sensory motor schemas'.¹⁵ They are ways of selecting and recording those elements of past experience that continue to be useful to us and, with these, placing a claim on future actions. When the schemas function optimally, they direct our attention away from the ongoing sequence of events in which we happen to be involved. Sensory motor schemas create an obviousness of experience, somewhat like Pierre Bourdieu's *habitus*: 'the art of anticipating the future of the game, which is inscribed in the present state of play.'¹⁶ But these habitual structures are finite. They have a 'natural contractile range'.¹⁷ Schemas break down. Patterns fail us. When I am driving in my car, I am sometimes startled to realize that I had not really been paying attention to the road, and that it was only by means of a series of habitual actions (rather than an attentive perception) that I had negotiated my way around the various obstacles – bicycles, potholes and oncoming traffic. Without thinking much about it, I had unconsciously retained my earlier driving patterns, and knowledge of the way home, and played them over again, so to speak. The action had become habitual. It is only when these kinds of schemas break down – I narrowly avoid a car crash, or I provide the wrong response – that the synthetic activity behind habits reveals itself.

When sensory motor schemas break down, the present is ripped out of its continuum. Perception is no longer able to situate the object in its original trajectory. In these moments, we appeal to memory to provide images that correspond to the now uncanny perception, so that we can engage it and once again make it useful for the present.

When our habits fail us, and we must actively recall something from memory, Bergson explains, we do not go immediately to the past image. We first enter the past in general and, from there, move toward a particular memory. He likens this to the way that, when looking for a word in a foreign language, we do not go right to the word, but first enter French or Chinese, and from there orient ourselves toward a particular expression.

Recollection, then, is not a property of the recollected image. And this simple problem opens out onto still more complex ones. For, if memory is not in the current present, nor in the one that has passed, then where is it? Time congeals in sensory motor habits and, as we saw in a previous section, habits produce a symmetry among the tenses. Habits have a certain 'contractile range' that gets exhausted. But how do habits break down? How does the present formed in habit become 'the past'? These

are the questions that lead from the breakdown of a specific memory, to some of the most difficult questions in the ontology of time.

As long as we suppose that time is composed only of presents (past, present or future present) it is difficult to understand when the passing of time could occur. Consider the possible alternatives: a) The passing of a moment could not take place at the same instant of its appearance, or the appearance of the present would be simultaneous with its destruction, and events would never have time to take place. But b) neither can we delay the passage of the present until some future moment, or else the current present would have to wait until some intervening span of time passed before it could dissolve. If that were the case though, if the present had to pause, it would also have to co-exist along with the intervening span of time and yet not be changed or affected by its passage. This is the problem faced by all efforts to 'spatialize' history in however sophisticated a form of time-line, or to imagine time-travel. We cannot delay the passing of a contemporary present while we rush ahead to another one. Finally, c) the present cannot not be destroyed, or else all events would occur at the same time, and there would be no distinction between present and past, and therefore no time as we commonly refer to it.

Passing itself escapes a present-centered understanding of time because presentism deals with already constituted moments. Still, habits synthesize time, and they pass in the time they synthesize, so, as Deleuze explains, 'there must be another time in which the first [habitual] synthesis of time can occur.'¹⁸ This problem, which Deleuze calls 'the paradox of the present', is the terrain staked out by Bergson in his concept of 'the past in general'.

The past in general

The present passes. It becomes past. It changes from being a present present to being a past present. What is the pastness that now attaches itself to the (former) present? The pastness of a formerly present event cannot be a property of the substantive content of that present. Otherwise, the event would always have been past and would not have had to wait for its passing. What we can say is this: If an event is past, that is because it can be defined in relation to a new, current present. This relation is the condition of any present present becoming a past present. And so it is also the condition of whatever empirical and diachronic resemblance we associate with recollective memory and habit. This is why, in *Matter and Memory*, Bergson insists on a difference in kind between the present and pastness, or the past in general. In other words, the presents are the

elements that are linked together to form a sequence and, the past – the ‘past in general’ – is a name for the relation that unites them.

Bergson’s whole point here is that the relation cannot be derived from the relata. In other words, the past in general is not a former present. It is not any kind of present at all. We might call it a modal condition that enables the present to change its modality from present present to past present. The past in general may therefore be thought of as the ‘determinability’, the capacity to be de-(term)-ined, or directed toward another end/terminus.

Husserl and Bergson

‘Pastness’, in the sense we are describing here, then, is different from the contents of the past present. To grasp this rather abstract point, it might help to consider how the image of time offered here differs from Husserl’s well-known *Phenomenology of Internal Time Consciousness*. And, as we recall Husserl’s contribution, we should not forget that it was only a year after Heidegger had edited his teacher’s manuscript on internal time consciousness that he declared, in his lectures at Marburg, that it was Bergson who had produced the most sophisticated theory of time we possess.

Husserl offers a series of subtle distinctions to explain the curious kinds of relations we can form with the past.¹⁹ Retention is the simpler of these, where we experience the present and, at the same time, some of the past from which it has emerged. Just as one sequence of a film can fade into the next, so does our capacity for retention enable the present to retain a reference to its immediate past. Husserl describes this ability to retain the after effect of a moment with the very beautiful image of a ‘temporal halo’, a radiance of the former image that surrounds the present.²⁰

Bergson’s pure past is clearly different from this halo effect. It differs as well from Husserl’s more complex notion of reproduction, which describes the memory process that takes place when some utterly distinct, former present is represented in the current present. When, for example, I remember an event from some years back, I am able to reproduce not only the event but, along with it, the sense of anticipation and memory that accompanied it. As I write this fall is approaching and I remember a fall wedding some years back and the friends who attended it. But if I try a little harder, I can recall the circle of friends who did not attend because they were drifting into obscurity, and others who would drift or draw closer in the years that followed. In other words, I remember the former present, complete with its halo of protentions and retentions.

And most importantly, I remember it not as a part of my current present, but rather in distinction to it.

In Husserl's 'reproductive memory', we recognize a difference between the present that is recollected, and the one that is experienced as the living present. We build relations between these moments so that one present functions as the antecedent out of which the succeeding one emerges. In this case, the first event not only precedes the second one. It appears to provide the form from which the second derives. Or, in a more contemporary, Hollywood formulation, the past is the prequel to the present.²¹

Husserl's concepts of retention and reproduction suppose that a given image can shake off its existing determination and be 'reembedded' in some new sequence of events. But what Husserl ultimately describes is the result of memory's determination. With the notion of the pure past, Bergson wants to describe the process of determinability itself that allows the break down and reformation of new memory structures. To escape the logic of presentism, he tries to change the order and value of the tenses, of their relation and the whole in which they participate.

For Husserl, the present remains through all of this the general element, or whole of time. Past and future are particular elements of that whole. The present may be infinitely small or large. It is 'stretched' by its halo of protension and retension. It might produce a single long diachronous structure that stretches from past to future. Past and future are, however, still 'adjectives' that qualify the present but do not modify its status as the general element of time. On this view, there is only a difference in degree between present and past. The past is a past present, which means that it is of the same nature and kind as the current present. Its pastness, however, is still understood as a lack of presence. In order for the past to present itself in memory, it must borrow its life-blood from the new present in relation to which it (the former one) is past. It is in this sense that the present remains the 'general element' of time.

To summarize then, with the past in general, Bergson elevates 'the Past' to the status of the universal, general element of time of which the different presents are now particular expressions. The past in general is not a tense, but rather an enabling condition that allows relations of empirical and diachronic resemblance to form among presents. It is not a particular kind of present, like St. Augustine's 'present of things past'. Passing, or the past as such, is instead the general element, or 'whole' in which different moments of diachronic and empirical time can form.

Memory, then, is a movement of recollection, consisting of three moments. There is firstly some past recollection image which is recalled;

there is, secondly, a present perception image which resembles the past one and toward which the past is headed; and finally there is the interval of what Bergson calls 'pure recollection', or the past in general, in which the synthesis of memory is accomplished, and past and present are united together in some newly formed memory.

Now, if memory consisted only of present moments, the period of recollection would be nothing but an obstacle, and the more quickly we could unite the past present with the present present – with pneumatic devices and memory cues – the better. The recollection interval would have the same supplementary status we have encountered in other kinds of intervals: It would have to be both a means for transmitting the past into the present, and an obstacle in the way of its conveyance. In other words, if memory is derived from the present, recollection has no real determining role, since it only makes actual what already exists.

The past in general then, is neither discrete nor continuous. It is an organizational device, or connective tissue, that allows these two orders to penetrate one another. The past in general is the difference between the indeterminate possibility of the past image and its concrete determination as a memory in the present. But that difference is not an empty space that impedes recall. It is 'a machine that turns the indeterminate into a determinate phenomenon'.²²

The past in general and the transcendental idea

Deleuze compares Bergson's concept of the past in general with the Transcendental Idea that Kant placed at the center of reason. Thus, 'the [Bergsonian] past is to time what the Idea is to thought' because, like Kant's Idea, the past is an organizational device that allows the otherwise separate moments of experience to be united in logical and temporal relations.²³

As we saw in an earlier chapter, for Kant, the Idea is the highest point, or the 'unconditioned condition' of reason. It is not a concept, but an organizational form that enables any given concept to extend beyond its own limited function and participate with other concepts in syllogisms and intellectual constructions that concern the whole of reason. For Bergson, the Past in General has a structurally analogous function. It is the 'general element' of time which is not itself a tense, but more like an enabling condition that allows differently tensed events to transcend the present in which they first appeared, and participate in more complex patterns of memory and continuity.

As Bergson's work evolves, he moves away from the early opposition of time as point and continuum toward a more complex account of time as an 'open whole'. What Bergson meant by whole is very unusual. It is neither an *a priori* condition given in advance of experience nor the sum total that results from the addition of a set of parts. Whole is instead a principle of openness that allows the parts of a system to be in a state of transformation. As Gilles Deleuze explains:

Many philosophers had already said that the whole was neither given nor giveable: they simply concluded from this that the whole was a meaningless notion. Bergson's conclusion is very different: if the whole is not giveable, it is because it is the Open and because its nature is to change constantly, or to give rise to something new, in short, to endure.²⁴

Thus, the Past in General addresses a problem very similar to the one that interests Benjamin: how to understand the historical itself as a quality of time that belongs neither to diachrony nor synchrony, but to the interval in which they participate.

Benjamin finds Bergson to be of limited use in this task, though, because he supposedly ignores the context that makes these insights possible, which is the empty homogenous time of industrialism and bourgeois society. But already in *Matter and Memory*, and increasingly as he moves toward *Creative Evolution*, Bergson's thinking has moved away from interior poetic reflection toward an 'immanent critique' of scientific and mechanical time.

In *Creative Evolution*, it is clear that this insight into time is facilitated by certain historical conditions. Bergson's thesis on time is not, as Benjamin suggests, a transcendental insight based on interior poetic insight, but is very much grounded in the culture of scientific modernity, specifically in the mechanical dissection of movement into any instants whatever. Bergson does not want to return us to some pre-scientific mind-set. His whole point is that the scientific dissection of movement into distinct elements does not carry us far enough.

Because mechanization produces such a radical break with received notions of unity, it is, for both Bergson and Benjamin, a kind of vanishing mediator that makes available for our reflection something that is decidedly non-mechanical – shock, radiance, vibration, the past in general.

If we can place their religious and political affiliations aside, then, what we find is that Benjamin and Bergson share a methodological principle: one that regards 'temporal breakdown' – whether as memory failure or

shock effect – as the necessary prelude for a metaphysical concern with the mechanism of association that links the any-moments of a sequence. This theme, we might call it the ‘heuristics of interruption’, sets the tone for a wide range of critical post-war reflections on the serialized life and time: one branch leads off into French Catholicism, phenomenology and philosophies of difference that celebrate the multiple. Another guides itself by the light of the Lukacsian–Frankfurt critique of reification. What unites these otherwise very different positions is the desire to provide the empty time of mechanical reason with the metaphysics that it supposes but does not articulate.

The task of thinking, then, is not to get back to a point before mechanism altered the world, but to catch mechanism in the midst of its activity; after it has broken down one sequence, before it has assembled another. This project is only possible in a world that has already been paved over by the analytic machinery of modernity. This is why, in addition to the well-known themes of continuity and duration, system breakdown and failure become such powerful themes after Bergson, and that is where we turn our attention now in the final section of our meditation on mechanism, means and media.

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Part III

Man Falls Down: Unanswerable Situations

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8

Compromise Formations: Bergson's Vitalism

At the center of Bergson's philosophy, we find a basic dualism of mechanism and vitality that repeats itself in a variety of oppositions, such as discrete and continuous multiplicities, points and continua, or synchronous and diachronous time. On the one hand, Bergson recognizes that we have to live in bodies and machines, languages and numbers, whose 'discrete' qualities separate us from the flow of life – the *élan vital*. On the other hand, he will sometimes speak about intuition (rather than intelligence) as a kind of sympathy with things that allows us to fall out of reason and back into the immediacy of life. It is easy to suppose that Bergson is an animist or vitalist who rejects the contrivances of culture in order to fall back into the wellspring of being.

The more we puzzle into it, though, the more complex is Bergson's image of 'vitalism'. It is, in the final analysis, a name for the difficult exercise of thinking two things at once – the body as a virtual, limitless force and the body as a controlled, mechanical apparatus. Because we must be these two things at once, we never get to see a pure, uncut version of ourselves as either machine or vital force. We encounter the *élan* in us only after it has passed through the analytical divisions of some device. That is why one of the most frequently recurring motifs in Bergson is the compromise formation. We only catch a glimpse of life when the mechanisms through which it passes break down or malfunction, in the same way, for example, that for Freud, the secrets of unconscious desire only present themselves in the failed, compromised expression of our wishes as they are revealed in slips of the tongue, jokes, dreams and a range of neurotic behaviors. Bergson's most intense analysis of this principle of 'truth through mechanical breakdown' is his largely underappreciated essay on *Laughter*, to which we will soon turn our attention.¹

Bergson's metaphysics of broken schemas and failed devices anticipates an important and under-represented vein of art and theory that looks for evidence of vitality in the persistent failure of the mechanical devices and schemas we use to try to regulate and control it. In a moment, we will explore this Bergsonian theme of 'the truth in failure' in various twentieth-century developments – in the comic arts, in neo-realist cinema, in epic theater and early experiments with photography and film. What unites all these very different developments is the desire to escape the dualism that reduces the body to either a docile, controlled machine, or a pure unencumbered life force.

Before we turn to Bergson's development of these ideas on breakdown and failure, though, it might help to situate these reflections on his vitalism in a larger historical framework. What I am going to suggest here is that Bergson's efforts to overcome the dualism of the discrete and the continuous, or the gooey and the prickly, is itself rooted in the nineteenth-century experience of finitude, in which body and spirit undergo a whole new reorganization. Our first task, then, is to locate Bergson's vitalism in the age of finitude.

Bergson in the age of finitude

In *The Order of Things*, Michel Foucault explains that 'Man', the subject and object of the nineteenth-century human sciences, is forced to live a double life. 'Man' comes into the world through some definitive set of conditions – a body, a language, a culture – that he did not choose but with which he must form some relation. He uses these words that are there before he came into the world. He lives in this body that moves itself toward death, and he participates in a culture that has a form and structure that shapes him. While he lives in these structures, he is not reducible to them, since he is also the 'transcendental' ground of their appearance. His relation to the forms his life takes is complex. His words have no existence until he speaks them and brings to them to life, but he has no enunciative function until he utters these dead letters in some recognized form. He cannot refer to himself, or distinguish himself from all others, without using the pronoun 'I', for instance, yet it is the same device that billions of others use, so it never properly belongs to him. He actively moves himself through the world, but in gestures and bodily forms that he has passively received.²

Man, then, is defined neither by the storehouse of events he experiences, nor the set of abstract conditions that make these possible.

He does not fully belong to either the transcendental conditions of experience, nor the empirical contents through which life takes shape and form. He is the being who finds himself straddled across this void. Trying to get some foothold in that abyss, he throws his weight on one or the other of its edges. So, one stream of modern thought deals with the problem of finitude by formalizing the contents of experience. Structuralism, positivistic strains of social science, and analytic philosophy with its catalog of truthful functions and propositions, all try to describe the contents of experience and to draw up an index of the possible permutations of human thought. Another stream, opposed to this and of which Husserlian phenomenology may be the best example, tries to distill from our engagement with things the transcendental conditions of our experience of any of them. Hence the difficult, 'doubled' existence of finitude: We must suppose some force of life that animates these bodily forms, but we have no access to this upsurge of vitality except through the constrained movements that give it expression.

In this new, radically immanent world, finitude does not mean simply that we die, but that our being is dependent on some external object or structure in which it comes to life. Finitude is receptivity, as Heidegger has shown, which means that our being is always resolved in some concrete form – in a here or a there, in a this or a that. As a result, even though we can only gain access to ourselves through the forms of being and kinds of identifications that we have, we remain in important ways outside these structures.³

The recognition of this 'doublet' of finitude signals an important change in our relation to the bodies and animals that we are. Aristotle, it is well known, says that we are animals with the additional capacity for politics. In his late 'history of sexuality' period, Michel Foucault showed us that something new happened, and we 'crossed a threshold of modernity' when, somewhere around the eighteenth century or so, we began to make our physical – animal – existence the object of our politics.⁴ From that point on, 'life' has ceased to be an inert substrate of the political and has become instead the very thing that power seeks to administer and regulate. Foucault describes this as a change from an older, negative power that represses and blocks, to a new positive productive force, or 'biopower', which shapes and administers it from within, best exemplified, perhaps, by the manipulation of genetic material and the statistical and actuarial control of populations. Giorgio Agamben concludes from all of this that the basic opposition of politics for us today is no longer friend and enemy but law (or *nomos*, order in the most general sense

imaginable) and life, or the contingency of the circumstances in which law must be applied.⁵

The administration of life itself takes on a whole new significance today in light of recent technical advances and researches in life process of the past quarter century or so, the greatest hits of which must include the mapping of the human genome (itself a significant moment in the battle between state and private bio-research), the now once again respectable question of whether there is life elsewhere in the universe, and the new kinds of vital/risk politics which concern the management of dangers that address us at the level of the living being – nuclear fallout and swine flu being only the most recent examples. Some mention should also be made here of the new vitalism in art in which the body is no longer a thing to be represented but becomes the most basic medium of artistic practice, from Stelarc molding an ear onto his own arm to the Canadian poet Christian Bök's effort to encode a poem into bacterial DNA.

The study of life today, in other words, must accomplish two contradictory things: It must recognize the ever more sophisticated administration and rule over living processes, but at the same time show that life is something more than what our devices manage to contain and order. That is why reflections on 'life', whether they set out from social constructivism or a brute biologism, all eventually find their way back to Bergson's dualism of the body as an apparatus through which control is extended, and as a source of vitality and life that exceeds the grip of any machine we impose upon it. For, no matter how much the body is trained and disciplined, it is always capable of becoming something else. Life is resilient power. It is will to power. Life is the capacity to strive toward alternative forms. Spinoza liked to point out that we do not yet know what a body can do, and Georg Simmel insisted that 'life' always also means 'more life', the capacity to become other. Even in the darkest parts of *Discipline and Punish*, Michel Foucault could still hear the roar of battle – the rumble of capacity and pure potentiality – on the outskirts of the carcereal archipelago.

Mechanism and vitality: Bergson's compromise formations

The difficulty, however, is still this problem of thinking two seemingly contradictory things – vital impulse and mechanical structure – at once. Therein lies the appeal of the 'compromise formation' for Bergson and the lines of thought and practice that follow in his wake. The body is never available as either spirit or machine. We have no immediate

relation to life. And, more to the point, the mechanization of experience does not simply prevent access to our vitality. In fact, modernity's dissection of reality into discrete elements, or 'any-moments-whatever', may also actively play a role in throwing 'life itself' into high definition as an object of thought. Could it be that we have to pass through the logic of mechanism before we can understand the vital impulse that our mechanisms suppose, but cannot think? This, at any rate, is the premise of all the metaphysics of broken gestures, arrested movements and unanswerable situations that Bergson develops at the turn of the century, and that continues to inform a rich vein of art and theory that develops after him.

In Gilles Deleuze's philosophy, for instance, desiring machines work only when they break down, and in his *Cinema* books, sensory motor breakdown is a defining feature of post-war film. Following a very different intellectual tradition, we find the same theme of truth through mechanical breakdown in Walter Benjamin's work on the relation of body and gesture in epic theater and still more recently in Giorgio Agamben's reflections on what can be learned from the automation and routinization of human gestures. The point of all these various theoretical endeavors is to seek out situations in which our mechanisms and habits fail in their attempts to capture the spirit of life and, in that way, make visible the complex circuit that binds *animus* and *techne*.

What we shall try to understand here is how we might connect this interest in the creative destruction of mechanism to a longstanding 'subterranean theme' in philosophy that sees metaphysical speculation begin with an experience of breakdown. The Kantian sublime emerges when the mind reaches its limits of cognition, or breakdown. Marx famously declared that it is only when 'all that is solid melts into air' that man finally faces with sober senses his real relations with others.⁶ Heidegger pointed out that we only ask about the essence of the hammer when it breaks, and Freud compares the mind opened to analysis to a crystal, which, flung to the floor, breaks so as to reveal its lines of cleavage.⁷ More recently, Simon Critchley has argued that philosophy no longer begins in wonder but in failure and destruction, and Judith (Jack) Halberstam celebrates 'the art of failure' as an important and undervalued critique of the conservative culture of success.⁸

It was Henri Bergson, however, who provided the most intense and interesting variation on this theme of the truth in breakdown. In Bergson's metaphysics of movement and change, the failure of the body's sensory motor extensions is often the necessary precondition for epiphany and insight.

Bergson on the evolution of organisms

As we have seen in previous chapters, one familiar critique presents Bergson as an anti-modern figure who appeals to a lost unity of experience. In fact, Bergson was, from the start, deeply engaged with the latest modern science of his time – from the psychophysics of Fechner to the evolutionism of Spencer and Darwin, and the many references to cinema, telephones and telegraphs, cameras and telescopes that run through this work.

Bergson's usual method is to search through the mechanical world for evidence of some pulse of vitality that mechanism supposes but overlooks. So, in *Time and Free Will*, he wants to show that the quantification of experience in modern psychology cannot do without a theory of novelty and change. In *Matter and Memory*, the point is that memory cannot be derived from the presents that it connects, but supposes a 'past in general' that he likens to a telephone switching station in which they communicate. In *Creative Evolution*, the scientific language of T1 and T2 supposes a theory of duration that science itself is incapable of describing.

In *Matter and Memory*, this dualism is located in the body, which is at once a mechanical apparatus and a thriving source of vitalism. Bergson's philosophy of the body sets out from the very interesting hypothesis that the complexity of an organism is a function of the delay it is able to establish between perception and action.

For more simple organisms, touching and acting are one and the same. As we move up the scale into more complex nervous systems, we are able to retain patterns and schemas of action as memories. It is this retention of past responses as a storehouse of memories that allows us to consider multiple possible responses to any new object we subsequently encounter. This ontological fact of memory (distinguished from the particular contents of any specific one) Bergson calls 'pure recollection' or 'virtuality'. The non- synchronous quality of pure recollection establishes an element of indeterminacy in the relation between perception and its object. This delay allows us to escape the immediacy of the present and to open up various different responses to, and encounters with, the world.⁹

Bergson's guiding thought here is that any given thing that interests us is always capable of more determinations than we can make use of at any point. In automatic or habitual recognition, our perception grasps the object and at the same time links it with others in the execution of a sensory motor movement. Habitual recognition is 'subtractive'

because as we perceive the object, we subtract all that does not fit into the schema and help execute the movement.¹⁰ It is 'habitual' because each time I see the object, I expect a corresponding schema. The creation of this habitual 'gestalt' is the end result of a more complex procedure that first subtracts all the other possible tendencies and movements with which each of the separate cells of action might have connected, to produce other very different kinds of events.

Bergson's philosophy has sometimes been described as a kind of 'thinking backwards' because its project is to step back, as it were, from the end result of subtracted perception to this interval of indeterminacy that memory makes possible. In pursuit of that interval, Bergson often turns to the frontier regions of human experience – déjà vu, dreams, misrecognition, aphasia, false starts, memory failure and, most interestingly, perhaps, laughter.

The mechanics of laughter

With all the resurgence of interest in his work, it is strange that *Laughter* is still overlooked. The long essay or short book, published in 1901, occupies an unusual place in Bergson's oeuvre. It continues themes already begun in *Matter and Memory* – the breakdown of sensory motor schemas, the subtractive nature of perception, the relation of mind and body – and it offers some of the most interesting insights on the tension between mechanism and vitalism that informs all of Bergson's work. *Laughter* anticipates the critique of science and its analytic decomposition of time into any-moments that he would later develop in *Creative Evolution*. It also makes it clear that Bergson's concerns about mechanical thought are not a romantic throwback to the pre-industrial age but are based on the more exciting prospect that our encounter with mechanisms can offer us some new insight into what sort of covenant we might make with the means – the gestures, languages and structures – in which our lives transpire.

The thesis of *Laughter* is simple: Laughter is the recognition of our failure to submit life to the constraints of mechanism. In a joke or a gag, some plan or schema is made to break down. Knock-knock jokes, for instance, create an anticipatory schema that the punch line brings to an abrupt end. Slapstick characters are restricted to such a narrow range of movements that they are defeated in the simplest of tasks. A speaker who repeats the same gestures is funny because, while his thoughts seem to be fluid and to change with the progression of his speech, his physical expression lags along behind it. Laughter always

involves an element of non-synchrony or untimeliness. A gesture or phrase that was formulated in the past, appears out of place in the new reality the present thrusts upon us. Things that are funny always concern a discord between what we had planned and what is actually occurring, between expectation and contingency, and so ultimately between mechanism and vitality. At the heart of the comic is a profound absent mindedness. We laugh when it seems as though life had forgotten to move forward and instead skipped and repeated itself like a broken record. We are able to ignore the urgency of an event and see something about how it takes place. In this way, laughter unites our most trivial encounters (a banana peel on the road) with the greatest flights of intellectual abstraction.

At the heart of Laughter is a mediation on means, or how things take place. Laughter, Bergson claims, always originates in the discord between what a thing is and how it takes place, or the matter and manner of its existence. Laughter exposes the thingliness of things, the backgrounds of situations. It does that by separating an action from whatever meaning and purpose it would have served in the normal course of affairs.

In *Matter and Memory*, as we saw earlier, Bergson shows us that we learn something about the metaphysics of 'pure memory' when memory breaks down. Recall that it is only when we forget that we wonder what memory is, and how time passes. When we cannot recall a face or a name, or when the body does not know how to react to a broken plate or a car accident, we wonder about the schemas we impose on the world. When a memory fails us we ask how past and present were ever joined in the first place. We leave the present and enter the realm of pure memory, or the past in general. In 'a series of attempts at a synthesis' the mind wraps the present image in 'recollection-images' or 'sheets of past' and in that way raises the most elementary questions about how the past and present ever communicate at all.

The essay on laughter brings us into a similar kind of intervallic state. As any comedian will tell you, 'man falls down' is the basic cell of all jokes. Why is it funny? Because man had expected – unconsciously perhaps – to be able to walk along without event and continue on in some scheme or narrative he had planned. Why is it philosophically interesting? Because only at that moment do we recognize that the conceit of the schema was that life would offer no other obstacle. The falling man is funny because at the very moment when life required something new, he just kept doing the same old thing. He fell into the interval between the future he had projected, and the present that placed some new claim on him.

We laugh, however, not only because a habit has ceased to work, but also because this moment of breakdown opens out onto a more intensive engagement with the nature of situations. There is always some universal insight at stake in the always very particular details of a joke or comic scene. When habits fail us, we look more attentively to see what our original perception had subtracted from view. What absented element has returned to interfere in our plans? This is how we learn when we fail: Perception is lifted out of the realm of use and need, and connected instead with a circuit of thought and reflection where the activities of projection, synthesis and habit formation take place.

Consider a man falling down: What is even funnier than his falling is the little gesture he makes when, dusting himself off, he turns back to examine what had tripped him up. In that instant, he has entered the foreign language of movement where the chance encounter of the banana peel, the body and the stretch of time circle around each other before getting linked in a sequence. A new point in time interrupts an established sequence. And just as the past in general does not belong to any present, but is the connective tissue that links them in an order, so too in laughter we do not belong to the past where we had planned our actions, nor the present where we tripped up, but to the interval between them, where a moment is hooked onto a sequence.

Simon Critchley has shown how the temporal structure of many jokes oscillates back and forth between a point and a continuum.¹¹ A joke usually has some long, drawn-out sequence in which a narrative or scenario is established: Did you hear the one about the German, the Pole and the American who went fishing? Knock-knock jokes have an almost unbearable prelude to the punch line, which is a sudden interruption of a long line by a short point. The laughter produced is in direct proportion to the ratio of lead-up to punch line. The important point, however, is that humor is not in either the point or the line. It is not synchrony or diachrony that is funny, but the clash between them.

Life and art

Jokes reveal to us the most basic activity of making time (or temporalizing) where we hook a point onto a line, or a moment onto a sequence. This is the interval, according to Bergson, in which we respond to the reception of sense with the execution of a sensory motor pattern that organizes it. Laughter signals our arrival in this division between life – what presents itself to us – and art, or what

we try to do with the given. And, since we are the only creatures that shape life as an art, laughter always concerns the human element. It always reveals the stamp of the human on the trace of life. We laugh when we recognize that an intentionally created repetition mechanism has been imposed upon a living, changing process. Even if we find a landscape humorous, Bergson argues, it is because we imagine that it has been fashioned into say, a nose or penis or an animal by some human agent. For the same reason, bodily deformity makes us laugh because it appears to be a repetition mechanism that human agency has added on to an otherwise 'normal' body. In passages that date the essay from what seems like a prehistoric age, Bergson asks why we laugh at the hunchback (because he seems to be a normal person to whom a hump has been added), and the Negro (appears to be a white person who has been painted black).¹² Here, too, the lesson is that laughter always concerns our imperfect attempts to stamp a human design on the blind force of life. When our schemas fall out of synch, the form we give to life lags behind the vital force that thrusts onward, indifferent to our need.

This clash of art and life is most apparent in humor that addresses the division between the moral and the physical dimensions of a person. We say of someone in whom these two elements are in stride that they have grace. The body seems to be animated by the spirit passing through it. Roland Barthes famously celebrated Audrey Hepburn's face because it registers the changes taking place in its interior in a perfect way – gracefully.¹³ When body and soul come apart, however, we ask about incarnation and embodiment. Charlie Chaplin's jerky movements lack grace, and there lies their comic potential. He makes his body seem like a machine he has to carry along, which is always one clumsy step out of tune with his thoughts. So, 'any incident is comic that calls our attention to the physical in a person when it is the moral side that is concerned.'¹⁴

In the return to these details, in the scintillating, intensive engagement with the event, the joke requires us to reconsider what we thought we had known about a situation. What had we skipped over in our rush to make a plan? Comedy, then, is intellectual in a way that many other ways of being in the world are not. It suspends the purposiveness and need in activity, in order to see what we can learn about how events take place. We might say that a joke or a comic sketch makes visible the background of a situation. It places in question the unstated assumption that gives an event its definition. Comedy has a defamiliarizing, or alienating effect. It creates an 'anti environment', as Marshall McLuhan calls it.¹⁵ It

breaks down the givenness of an environment and makes us ask how we had ever constructed one in the first place.

In other words, comedy directs us away from the figure at hand to the background against which it appears. In this way, it has something in common with the phenomenological technique of *epoche* – the active suspension of our preconceived notions about things. Unlike the phenomenological gesture, though, Bergsonian laughter does not lead back to the transcendental conditions of experience. It directs us to the middle ground between the matter and the manner of being.

Unanswerable situations

Helmuth Plessner showed that laughing and crying are both kinds of experience where the difference between being and having a body becomes apparent.¹⁶ When we laugh, our bodily comportment and control breaks down and our physical being makes a demand on us. We are doubled over, racked with laughter, or conversely, in the face of a disturbing event – a death, for example – we can surprise ourselves as we collapse in tears. Laughing and crying are responses to what Plessner calls ‘unanswerable situations’, situations for which our usual habits and actions offer no adequate response. In these moments, the body asserts itself, and we lose mastery over it. Plessner’s thesis is not that we become the body, in a Rabelaisian revelry, but that in laughter we are brought into the divide between being and having a body. Our eyes water, and we gasp for air, as the hilarity overwhelms us. But even now, as we lose all composure and seemingly become our bodies, we are never that far away from the cognitive end of human experience, since it is always possible to say what we are laughing at – what we find funny, even if it is not entirely clear to us why we do.

To direct our attention to how something takes place, we have to suspend our immediate practical and habitual concern with the thing. Bergson describes an ‘anesthetic’ quality of all things comic. Laughter always involves a ‘momentary anesthesia of the heart’.¹⁷ What this means is that we can only laugh at something after we have removed it from the immediate sense of purpose that usually accompanies it. Laughing, we find ourselves in a peculiar relation to the purposive activities of the world. Our interest is not in the contents of an event, but in the way that it occurs. We observe it without being engaged. We stand there between the reception and transmission of a message, or the planning and execution of an event. I am a witness who watches without being involved. It is enough to plug our ears while watching a dance to see the comic absurdity of the action, Bergson writes.¹⁸

Movements and gestures

Bergson's most interesting treatment of this relation between vitality and mechanism occurs in a passage on action and gesture. As we shall see, the distinction Bergson develops here anticipates a whole series of aesthetic and intellectual developments that follow in his wake, and which all try, in one way or another, to articulate this complex relation of artifice and life. Bergson's thesis on gesture, like his remarks on graceless deformity, addresses a fundamental discord between body and soul. Action, in the sense he gives to it, is intentional and conscious and aims toward some definite effect. Gestures, on the other hand, are 'the attitudes, movements and even the language by which a mental state expresses itself outwardly without any aim or profit, from no other cause than a kind of inner itching.'¹⁹ Gesture is involuntary, automatic and aimless. More importantly, action unfolds in exact proportion to the feeling that inspires it. The ease and efficiency with which Clint Eastwood lifts and shoots his pistol seems to correspond precisely to the accuracy and speed of judgment he has made on the situation before him. But repeat the action out of context, or make it appear to be a machinic, repetitive action executed without reflection, and the effect is comic. For Bergson, this is because the gesture is then disconnected from any interior state that might have motivated it. The gesture itself is not funny. What is funny is the insight it now makes available into the relation of body and soul. This is why even the most revolting of our gestures can be comic.

When you vomit, for instance, your mouth opens, and your stomach's contents pour out. Look closely, though, and you see that between the opening of your mouth and the heaving of your gut, there is a little pause and a clucking sound that originates somewhere between the diaphragm and the throat. It is the hidden expression of vomiting. It is what we do in spite of our best efforts to conceal our own repulsiveness from ourselves. At a certain point, the great Newfoundland comedian Andy Jones tells us, I began to recognize these little gestures and moments that others did not.

In his one-man show *The King of Fun*, Andy Jones explains that, as a young man, he watched his friends go off to school to become doctors and lawyers but 'while I knew that I could probably do those things, too, if I tried, I knew that I could never could do them as well I could do that little clucking sound of someone vomiting...Anyone could be a judge or a teacher, or a cabinet minister. But only a handful of people see that little [gags] in the vomiting. I'm sorry kids, your father is not a doctor or lawyer...I vomit, I sneeze, I fart, I burp. I do them altogether.'²⁰

When we see our movements separated from their goals, we are better able to concentrate on the way that we occupy our bodies. We see that what we are has to be articulated through the apparatuses that make us how we are, or at least how we appear to ourselves and others. To open up this discord, laughter requires a suspension of concern, which is what Bergson means by an 'anesthesia of the heart'. We suspend our anticipatory care and concern for the thing. In our habitual activities, we see the thing minus what does not interest us. In laughter, that need is suspended, and we see the thing without the purpose that otherwise filters it.

Situation comedy

All comedy is situation comedy, in this sense, since it always concerns the nature of a situation, regardless of what purpose or meaning might be at stake in it. What remains of a situation once all sense of purpose and meaning have been evacuated from it? What is the husk or shell of an event? What is the simple fact of its occurrence? Whatever that is, apart from the events taking place in it, is the object of comedy.

It is easy to mistake *Laughter*, and Bergsonism in general, for a simple, romantic critique of the machine. It seems that it is only when the machine breaks down that we gain access to the spontaneous – the *élan vital*. Is Bergson suggesting, then, that if we could find some way of bypassing the contrivances we force onto life, then we would have a more direct access to the spontaneous, or the comic? This is the thrust of many of the critiques of Bergson's vitalism, from Bertrand Russell and Wyndham Lewis to Max Horkheimer and Walter Benjamin, on down to Alain Badiou.²¹ Bergson seems to offer us a simple opposition of life and machine, and a moral judgment that favors one against the other. But this reading misses an important element of Bergson's thesis. What Bergson says is that laughter emerges only when the machine breaks down. We laugh at the man who falls down because 'the muscles continued to perform the same actions when the situation called for something else'.²² It is in the falling itself that the person becomes thing-like and this is funny because only then do we recognize that a future oriented schema that had been put in place was not flexible enough to deal with the contingency that had emerged in the meantime. The discord between machine and life, signal and noise only becomes apparent at the moment of its breakdown. There are accidental situations in which this emerges, but a gifted comic can create them as well.

Laughter, of course, is not the only way of producing this kind of intervallic state. After Bergson, we find a whole new interest in the

use of emerging new media – film and photography in particular – to produce and explore similarly ‘unanswerable situations’ that lead into this middle ground between what things occur and how they occur, or between the matter and manner of events and ultimately, perhaps, between time itself and the events that occur within it.

Gilles Deleuze’s cinema theory elaborates these central principles of Bergson’s metaphysics of breakdown. We have already examined the way that depth and plane function in Deleuze’s cinema theory to describe a new image of thought that reorganizes painting, film and philosophy. What I would like to consider now, however are the ‘unanswerable situations’, if I may borrow Plessner’s highly useful phrase, that Deleuze finds at the heart of post-war film, most notably Italian neorealism, which, while not often very funny at all, nonetheless shares important affinities with the comic devices that Bergson pursues.

9

Unanswerable Situations

Deleuze's approach to neorealism is unusual. Guided by his unorthodox synthesis of Henri Bergson and Andre Bazin, he does not focus on the documentary techniques or the didactic messages of these films but rather on the new kinds of scenarios they explore – 'situations which we no longer know how to react to, in spaces which we no longer know how to describe'.¹ Neorealism takes these 'unanswerable situations' as its basic raw material. Roberto Rossellini's films are usually associated with the emergence of a new kind of realism that eschews the fantasy space of Hollywood cinema to present life as it really is. It made use of non-professional actors, real locations and no scripts. On this view, it prefigures the French New Wave, cinema verité, various kinds of documentary realism and even newer forms of user-generated media. For Deleuze, however, what matters in neorealism is not any social content, or humanitarian message. Rossellini's project is not a sociological exercise of providing context to the plight of war orphans and refugees and all the other damaged lives of the post war years. In fact, just the opposite seems to be the case. Neorealism attempts to strip away context and narrative in order to expose the enigmatic quality of a situation, and from there to teach us something about the nature of situations per se. In this way, it realizes the capacity of cinema to teach us something about the most basic properties of kinesis, that is to say, the movement or unfolding of events.

Traditional vs. neorealism

A traditional realism typically depicts an already constituted reality. It shows us the actually existing, if under-represented, life-worlds of social types – the peasant, the rebel, the industrial worker. They describe typical

situations and probable courses of action that unfold there. These kinds of realism, whether in the novels of John Steinbeck or Soviet realist films, are built on strong sensory motor situations in which characters seem to know how to respond to a given setting, and the film or novel depicts their typical movements and narrative trajectories. The viewers' identification with the scenario is based on the recognition of the setting and the kinds of actions that are possible within it. Realism produces 'reaction images'. The character responds, or reacts, to a situation by forming a sensory motor extension that closes the gap between setting and action.

Rossellini's characters, on the other hand, are caught up in situations that lack any clear narrative trajectory. The story lines are held together by only 'weak connections' and 'floating events'. So, for example,

Germany Year Zero presents a child who wanders through a foreign country, and who dies from what he sees; *Stromboli* presents a foreign woman (who) cannot react in a way that softens or compensates for the violence of what she sees; *Europe 51* shows a bourgeoisie woman who, following the death of her child, crosses various spaces and experiences the tenement, the slum and the factory.²

Rossellini's raw materials are the damaged and interrupted lives of refugees, orphans and new post-war victims of one sort or another who are dazed by the destitution of abandoned buildings, and broken railway yards. The everyday chaos they negotiate places them in situations that 'jam or break (their) our sensory motor schemas' and 'prevent perception being extended into action' so that it is 'put it into contact with thought'.³

Rossellini will often suspend or interrupt narrative movement in order to produce a thicker description of specific situations:

It is as if action floats in the situation rather than bringing it to a conclusion or strengthening it.⁴

A long shot surveys the contents of a room or a landscape, and then the camera stops for a spell on a character – on the pregnant belly of the young maid at the beginning of De Sica's *Umberto D*, or on Ingrid Bergman pulling at her hair while in existential breakdown atop the volcano of Stromboli. In each case, the thick, intense description of a single moment interrupts the distended narrative contextualization that makes it part of a story. The exploration of banality in these

films has a similar function; the camera will linger on insignificant ephemera – ants scurrying around a kitchen – that do not incite action of any kind but direct us to the density of events. Something similar can be said about the role of children in these films: Their powerlessness often forces them to witness situations without engaging them in any practical way. Rossellini is a documentarist because he captures the emergence of this new ‘unanswerable’ quality of modern life where characters are caught in situations that offer them no clear course of action.

Deleuze writes:

Post War Europe greatly increased the situations which we no longer know how to react to, in spaces which we no longer know how to describe...any spaces whatever, deserted but inhabitant, disused warehouses, waste-ground, cities in the course of demolition or reconstruction.⁵

The always to be deciphered quality of a situation

It is in this use of sensory motor breakdown, both at the level of narrative structure and in camera movement, that Deleuze finds a unity between the gritty documentary feel of Rossellini and the appearance, some years later, of the more hallucinatory and surreal modernism of Antonioni or Fellini. On the surface, the long, endless pause of an Antonio, where virtually nothing seems to happen to bourgeoisie couples on their afternoon picnics, has little in common with the wretched lives of pregnant mothers and street peddlers in Rossellini’s occupied Rome. What they share on a more formal level, though, is a similar use of ‘motor powerlessness’ to stall movement and provoke reflection.

So, where an older kind of realism aims at the narrative structure of an already deciphered reality, neorealism pursues the ‘always to be deciphered quality of a situation’.⁶ Rossellini, like Bergson, ‘thinks backward’ from the actuality of a present situation to the relations of time that make it possible. He uses the descriptive powers of color and sound to interrupt the flow of narrative movement and draw out different qualities of things, ultimately to show how a single event can belong to several layers, or ‘sheets’ of time.

Rossellini’s situations are often not very funny, but they nonetheless share many of the structural features that Bergson pursues in laughter. The characters are prevented from closing the circuit between perception and reaction. The narrative arc of the event is impossible to complete,

and as a result the viewer is led away from the story's diegesis to consider something more formal about the nature of situations per se. The premise of his cinema seems to be that narrative dilutes the intensity of an object by setting it in relation with other events that contextualize it. The more contextualized an event, the more we focus on the schemas that make it intelligible. Where narrative works through the distension of an object or a sequence, description aims at intensity.

Neorealism, or of Deleuze's account of it, at any rate, runs counter to our commonly accepted notions of context. It is common to suppose that we learn through contextualization. In the human sciences, structural-functionalism has taught us to understand how a part participates in a whole. From this perspective, the task of thinking is to fill out a pattern and create a system. But it may be that we learn most about ourselves and our situations when the world breaks down, and our schemas fail.

Interrupted gestures

We have already explored the way that the 'empty, homogenous time' and the 'shock effect' in Benjamin overlap with Bergson's critique of the atomization of time. It should not surprise us, then, to find echoes of Bergson's theme of truth through broken mechanisms in Benjamin's work as well. One of the most interesting variations on this theme is in Benjamin's work on Bertold Brecht's epic theatre. The parallels with Deleuze's Bergsonian-inspired cinematic theory are significant. In the first case, Deleuze, like Benjamin, sees film as not just one among other aesthetic developments but as a wholly new kind of device that helps us understand the unusual situations that characterize contemporary life. Benjamin thought that the moving image might help us to develop the sense organs necessary to make our way among the shock and awe of industrial life, in the same way that Deleuze thought cinema would help us navigate the enigmatic nature of post-war existence. Like Deleuze, Benjamin also sees the significance of film to lie not so much in its representational capacities, but in its kinesiological properties – specifically its ability to interrupt movement and provoke thought. And just as Deleuze ignores the didactic qualities of neorealism to get at its kinesiological properties, so, too, does Benjamin forego Brecht's Marxist messages of class struggle in order to focus on the theatrical techniques of interrupted movement, most notably those he considers under the general theme of 'gesture'.

Brecht's Riemannian space

Benjamin views Brecht's theatre through the same lens of Riemannian geometry that informs Bergson's distinction of discrete and continuous multiplicities and Deleuze's movement and time images. Samuel Weber summarizes:

The pre-Riemannian, 'Euclidian' condition of Aristotelian catharsis is a conception of space (as Benjamin writes of time in his text on history) as 'homogenous' and 'empty'. This 'Euclidian' space is one in which one position is in principle equivalent to and exchangeable with another, a space in which separation is defined in terms of the opposition of identity and alterity. The space of Brecht's epic theatre, by contrast, is neither empty nor homogenous, neither infinite nor unbounded. It constitutes a singularly heterogeneous medium, a curved Riemannian space defined and punctuated by those interruptions of continuity that Benjamin calls *Zustände*, di-stances that gesticulate and whose being *here and now* is determined by their virtual capacity to be *there and then*, to be moved elsewhere and transformed by their citability.⁷

Benjamin presents this moment of interruption as an epiphanic moment of wonder: 'The blockage in the real flow of life, the instant (*augenblick*) where its course comes to a standstill can be felt as an ebb. Amazement is this ebb'.⁸

Brecht produces this ebb of amazement through an arrested movement that is stylized, in part, on the techniques of early industrial films. For this reason, there is much to learn in comparing this theme of truth through interrupted movement in Deleuze's analysis of neorealism and Benjamin's thesis on epic theatre.

Brigit Doherty has shown that both Brecht and Benjamin were influenced by the new kinds of cinematographic and 'psychotechnical' testing popular in the early decades of the twentieth century. These were experiments that used the long exposure and stop-motion effects of photography and film to isolate very precise bodily gestures that could be tested and optimized for the production process. In *Mechanization Takes Command*, Siegfried Gideon examined many of these kinds of experiments.⁹

The chronocyclograph, for instance, used long exposure photography to record repetitive movements, such as doctors tying bandages, or masons laying bricks. The aim was to record subtle patterns in these

movements that would not normally be visible to unaided perception. Being able to see the flow and shape of the movement as it is completed by many different subjects allowed training institutions to recognize and eliminate individual variations. In this way, they could (or so it was thought) create a more perfect, objective template for training apprentices in the execution of complex gestures, such as tying a bandage or laying a brick. The important point here is that in the process of creating these films, it became necessary to make explicit by decontextualization those parts of human movement and locomotion that might otherwise go unnoticed.

This use of film to test and calibrate the powers of the body is often associated with Taylorism and the instrumentalization of life. Brecht, however, recognized in it an important aesthetic and political resource for his Epic or 'non Aristotelian' drama. Brecht wanted to overcome the illusion of theatre space and to make visible the mechanism of the 'mise en scène'. To draw attention to the staging, he deployed various techniques to 'interrupt' narrative movement and direct the audience's attention away from the flow of a narrative arc and onto the specific qualities of particular actions in the same way that testing films did. For example, in his epic theater, Brecht trained his actors to separate the imitation of a character's actions from any feelings of sympathy that the actor or the audience might have for the subject. Brecht's method was to get the actor to focus not on the goal of the action but only on its repeatable, habitual aspects – in other words, not on action, but on gesture in the sense that, in an earlier section, we saw Bergson develop the term. What the bearer of an action or attitude intends does not matter. The epic actor presents quotable gestures – habitual, repeatable movements – that might be enacted again elsewhere. It is these citable elements, rather than any thematic or narrative arc, that become the basic building blocks of 'epic theater'. Benjamin said that the Brechtian actor used gestures like pieces of type set by a compositor: 'he must be able to space [sperrn] his gestures as the compositor spaces words'.¹⁰

Gestures create the character

Brigit Doherty explains that the premise of Brecht's epic theatre is that the gesture creates the character, not the other way around. Consider Brecht's account of how he instructed one actor in the 'gestus' of washing:

She has not only learned to act, but, for example, she has learned how to wash herself. Up to then, she had washed so as not to be dirty. That was completely beside the point. I taught her how to wash her face. She acquired such skill in this that I wanted to make a film of her doing it. 'Doherty explains: When, as an actor, Neher showed herself washing herself with the intention of not being dirty, she failed to render the *Gestus* of washing precisely because she focused on the goal and content of her action, rather than its habitual bodily aspect and posture.'¹¹

The German word '*haltung*' can mean posture, comportment and a self-contained action. However, it can also describe the interruption of action and character. When Brecht compares this interrupting to reading 'footnotes, and the habit of turning back in order to check a point,' it puts us in mind of Bergson's metaphor of the telegraph clerk who ponders over the letters and sends them back for testing. What they both seek out in interruption is a suspension of narrative context that allows a more intensive engagement with the event at hand – to check a point once again.

In epic theatre, interruption becomes a method to produce gesture, and gesture is valuable because it exposes the repeatable or 'citable' quality of any gestic element. Samuel Weber explains that citability means that a thing can be disembodied from one context and reinserted in another. Citation is different from quotation: 'When a gesture is deployed so as to be citable, it does not merely harken back to what has been: it appeals to possible future transformation and transposition. Citability means recalling the past as the possibility of a future that would be different from the present.'¹²

Brecht wants to separate the bodily aspect of gestures from the 'narrative arc' to give us just the movements without any feeling of sympathy for their significance. He calls this decontextualized action – washing without the intention of becoming clean – 'gesture'. Samuel Weber explains that 'a gesture in this sense is a bodily movement that interrupts and suspends the intentional teleological movement toward a goal.'¹³

Benjamin formalizes the general principle at work here: 'The more frequently we interrupt someone engaged in an action, the more gestures we obtain. Hence, the interrupting of action is one of the principal concerns of epic theater.'¹⁴

Interruption produces gesture, and gestures are valuable because they expose the 'citable' capacity of any human movement. Movements

do not issue from intention. Intention can only be expressed through movements that are, in some way, external to it and capable of being directed to other purposes. Galy Gay, in the play *Man is Man*, is transformed into the perfect soldier: The same man as civilian and soldier, and even the same movements.

'One and the same gesture summons Galy Gay to the wall, first to have his clothes changed, and then again to be shot. One and the same gesture gets him to renounce the fish and accept the elephant.'¹⁵ The point here is not exactly the 'postmodern' insight that signs can be used again in different contexts, but that it is only through our alienation from the repeatable machinic elements of our actions that we can catch a glimpse of the vitality that animates them.

The 'crisis in gesture'

Giorgio Agamben's 'Notes on Gesture' returns in new and interesting ways to this same concern with what the mechanization of human movement can teach us about the ontology of actions and bodies. For Samuel Weber, as we have just seen, 'gesture' means something very precise: 'a bodily movement that interrupts and suspends the intentional teleological movement toward a goal.'¹⁶ Agamben's use of the term 'gesture' is more ambiguous and often difficult to pin down. Catherine Mills, for example, understands him to mean unconscious actions and unintentional movements.¹⁷ Sometimes, Agamben uses the term in this way to describe the 'un-' or 'pre-reflective' movements of the body. But what is more difficult to grasp is the role it plays in a general ontology of experience that he calls 'human being in a medium'. 'Gesture', in this second, more abstract, sense concerns 'communicability', or the basic fact of our ability to put life into language, no matter what the intention or meaning being conveyed. Gesture is 'what remains unexpressed in each expressive act'. In the background of every utterance is a tension between repeatable linguistic conventions and the singular uniqueness of a communicative event. In other words, while a grammar provides rules for the systematic, generalized usage of language, each statement we make is unique, if only because it occurs in an unrepeatable situation or context. Language positions us between a universal set of rules and the singularity of events. In gesture, we see the point of articulation between these general and particular qualities of expression.

To grasp this point, it helps to recall that gesture is etymologically related to 'gestate', which means to bring something to term or to carry something along. And here again, just as we have seen in all the variations

on this theme that we have traced from Bergson on, the idea is that this sense of gesture as the bearing or mediality of our being becomes more 'thinkable' now as our habitual movements, or gestures in the usual sense of the term, are broken down by mechanical modernity.

So, while Agamben's references are clearly very different from Bergson's, the basic thesis he pursues is not: the distillation of reality into any instants whatever destroys an older sense of human unity, and at the same time opens up new ways of understanding the relation between being and appearance. More to the point, the breakdown of our repetition mechanisms reveals a fundamental discord between life and the devices through which we attempt to order it – law, art, rhythm, schema.

Like Bergson and Benjamin, Agamben sets his comments on gestures against the background of the nineteenth-century mechanization of experience. It is by now a well-recognized theme that modernization breaks down the seemingly natural or unreflective habits and movement that have sedimented in the body. By the eighteenth century, Michel Foucault writes,

The human body was entering a machinery of power that explores it, breaks it down and rearranges it. A 'political anatomy', which was also a 'mechanics of power', was being born; it defined how one may have a hold over others' bodies, not only so that they may do what one wishes, but so that they may operate as one wishes, with the techniques, the speed and the efficiency that one determines.¹⁸

The great transformation that ushers in modernity broke up the sacred 'aura' or unity of the body into durations of movements and bundles of sensation so that 'by the end of the nineteenth century', Agamben tells us, 'the Western bourgeoisie had definitely lost its gestures'.¹⁹ And the kinesiological 'crisis' of gesture that followed opened up larger ontological questions about the nature of embodiment and being in the world.

In his artwork essay, Benjamin had pointed out that as the microscopic and slow-motion techniques of film caught us mid-motion at fractions of a second, they revealed unexplored dimensions of our kinetic and sensory life. Agamben's 'Notes on Gesture' connects together two unexpectedly related developments that anticipate these 'unconscious optics'. At roughly the same time that Gilles De Tourette, in Paris, set out to map the human gait, Edward Muybridge, at Stanford in California, was carrying out his photographic investigations of human movement. Muybridge's experiments, with their stop-motion

effects, broke down human movement into a series of tiny events, each photographic fraction of a second catching its subject in the midst of the most ordinary of human movements – *Man Walking at Normal Speed, Woman Carrying a Jug*.

Meanwhile, in Paris, Gilles de Tourette diagnosed ‘Tourette’s syndrome’ as ‘an amazing proliferation of tics, spasmodic jerks, and mannerisms – a proliferation that cannot be defined in any way other than as a generalized catastrophe of the sphere of gestures’.²⁰ Tourette continues this concern with the ‘crisis of gesture’ in his various efforts to measure and map the human gait. In his ‘Clinical and physiological studies on the gait,’ he had his subjects dust their shoes in a bright red pigment and walk across a blank white sheet so as to leave a trace of the pattern of ambulation. From these prints, he then reconstructed a quasi-algorithmic description of walking: ‘While the left foot acts as a fulcrum, the right foot is raised from the ground with a coiling motion that starts at the heel and reaches the tip of the toes.’²¹

In *Matter and Memory*, Bergson explains how ‘the multitudinous successive positions of a runner are contracted into one single symbolic attitude, which our eyes perceive, which art reproduces, and which becomes for us all the image of a man running.’²² Muybridge’s camera takes apart this composite form and reconstructs it so that it no longer functions as a ‘single symbolic attitude’ but rather as a set or group of images that give us an extraordinary, exploded view of locomotion. *Man Walking at Normal Speed*, or *Woman Walking with a Jug*, is an aggregate formed from discrete cells. In each, the whole action – walking, running – is reconstructed from the discontinuous photograph instants, just as Tourette’s mathematical description of the ‘natural gait’ is made by adding together the thick descriptions of each separate act of locomotion – the heel coiled, the left leg raised, and the rest.

In each case, though, the object of the experiments is neither the whole act nor the single instant but the middle ground between the distinct *poses éternelle* and the whole *gestalt* produced from their synthesis. Muybridge draws our attention to the way that an instant carries along a continuum. In fact, *gestar*, the root word from which ‘gesture’ derives, concerns a kind of ‘carrying’ or ‘bearing’. This sense is clearest perhaps in the cognate Latin term ‘*gestatio*’, which means to bear, to carry or to bring forth, as in to carry something to term. What interests Muybridge and Tourette is not exactly the contents of any of the atomic cells of action but the way that any of these elements or movements can bear, or carry a reference to, a whole of which it is a part. How does any single instant – the left leg raised from the ground, the right foot brought

forward, for example – become the means of expression for a set or a sequence of instants? What matters here is not the meaning of the action, nor its historical context, but the activity of linking individual moments to a sequence, ‘as if a silent incantation calling for the liberation of the image into gesture arose from the entire history of art. This is what in ancient Greece was expressed by the legends in which statues break the ties holding them and begin to move.’²³ Particular gestures might be enacted for a given purpose. They might be completed or interrupted, unified or broken, but gesture itself is a name for this carrying that lets a sequence gestate inside a moment.

To clarify the in-between medial quality of these movements, Agamben distinguishes gesture from both a purely aesthetic and a purely instrumental interest in the body’s movements. The opposition he develops here bears a remarkable similarity to the Bergsonian distinction between radical mechanism and radical finalism, which we encountered earlier. The military pursues an instrumental interest in gesture. It analyzes the body’s movement, but only in order to produce a more efficient pattern of movement. What the sergeant sees is not gesture *per se* but what can be produced from it. The military gesture is a means to an end. Dance, on the other hand, can treat the body’s gesture, not as a tool exactly, but as a pure aesthetic. It does not regard it as a means, but as an end or aesthetic totality that is immediate and complete in itself. Neither of those positions really gets us into the midst of mediality *per se*. In fact, each is a way of avoiding the middle of movement. ‘Finality without means is just as alienating as mediality that has meaning only with respect to an end.’²⁴

Dance gives us a pre-existing whole which the set of gestures then describe. The instrumentalized military gesture, on the other hand, breaks down human movement in order to reconstruct it in a new series, with a new set of logical relations that will form a whole only after all the elements have been assembled in a set. Both of these positions carry us away from the activity of bearing or carrying itself, where a whole is in the midst of being completed. Gesture as *gestate*, or activity of synthesis, cannot be reduced to the Aristotelian distinction of *poesis* and *praxis*. Nothing is made from it, and neither does it represent any pre-existing reality. The whole that the parts reach toward is not an accomplished fact, but a unity that is in the midst of being created.

Pure communicability

This sense of gesture as the unfolding, taking place or occurrence of a sequence is also the central trope of Agamben’s essay on Max Kommerell.

Kommerell, 'certainly the greatest German critic of the twentieth century after Benjamin', used the term *gesture* to describe a disjuncture between essence and appearance that was the basis of his literary criticism. A *gesture*, for Kommerell is a small sign of the corporeal that points to the indiscernible, as in the strange experience of the I staring in the mirror, which sees its expression as 'a pamphlet stuck to it, even incorporated into it'.²⁵ In this discord between what I am and what I appear to be, Kommerell locates the origins of both the sublime and the comical.

Kommerell distinguishes among a hermeneutic, a physiological and a gestural criticism. The first two kinds of criticism concern the context or meaning of a work. Gestural criticism, on the other hand, addresses the 'pure communicability' of language. What he meant by this was that the translator of a poem, for instance, must convey not only the manifest message of the text, but also how the poem reveals the basic, fundamental capacity of language to convey any message at all, in other words, the *poesis* in the poem, or its *mediality*.²⁶ Apart from the specific meaning being conveyed, and apart also from any historical circumstances of a text's production, there is the brute fact of language, the world coming to expression in a work, no matter what is being said. Agamben explains that '...if we understand the 'word' as the means of communication, then to show a word does not mean to have at one's disposal a higher level (a metalanguage, itself incommunicable within the first level), starting from which we could make that word an object of communication; it means, rather, to expose the word in its own *mediality*, in its own being a means, without any transcendence.'²⁷ Or, as he says elsewhere, 'What is being presented is, so to speak, *presentation itself*'.²⁸

The question, then, is whether an event – be it a text, a body or a movement – can convey something meaningful about its referent and at the same time express its capacity to be the means – the carrier, or *gesture* – of sense. Being is said in many ways, but what it is saying and how it is saying it are always unique. The means of manifestation is formed for a particular purpose and in a specific time and place. But the encounter of being and appearance, or simply *mediality*, is something that all speech acts share.

Agamben has pursued this theme of 'communicability' on many different fronts: through the distinction of enunciation and statement in Emile Benveniste, for instance, where 'statement' concerns the meaning of a sentence, and enunciation concerns its taking place, i.e., how a statement takes place or even that it takes place. In any case, what 'taking place' means is ultimately what is at stake here. Events differ

in their content, but the sheer fact that they occur is a generic quality that all have in common. The particular occurrence of any given event always also expresses this universal quality so that each communication also expresses communicability. 'The gesture is, in this sense, communication of a communicability.'²⁹ Werner Hamacher summarizes this as a concern with the 'the immediacy of a mediality'.³⁰

However, because communicability cannot be stated in any immediate, factual way, any given gesture always indicates this inability to gain immediate access to the being of a statement. So, a gesture is always about our not being able to figure something out in language. Because it is both means and obstacles to our insight into being, Agamben compares gesture to a gag: 'a gag in the proper meaning of the term ... [is] ... first of all something that could be put in your mouth to hinder speech, as well as in the sense of the actor's improvisation meant to compensate a loss of memory or an inability to speak. From this point derives not only the proximity between gesture and philosophy, but also the one between philosophy and cinema.'³¹

Agamben's reflections on gesture reveal that the subject is not a formed reality to which we might gain access. It is a kind of remainder, like Deleuze's image of the world as a remainder. He writes that the subject 'is not something that can be directly attained as a substantial reality present in some place; on the contrary, it is what results from the encounter and from the hand-to-hand confrontation with the apparatuses in which it has been put – and has put itself – into play'. This means then that 'Subjectivity [must] show itself and increase its resistance at the point where its apparatuses capture it and put it into play. A subjectivity is produced where the living being, encountering language and putting itself into play in language without reserve, exhibits in a gesture the impossibility of its being reduced to this gesture.'³²

We are returned here to terrain opened up by Bergson's investigations of vitality and mechanization. Recall that in *Laughter*, Bergson says that a comic plays back our actions, not in order to instruct us on how to better execute them, but to direct us to the unstated background conditions that remain otherwise invisible. I have already mentioned the etymological connection between 'gesture' and 'gestate'. We also note the etymological proximity of 'gesture' and 'jest' – the mimicking action that makes light of any serious intent that a gesture might try to convey. A 'jest' typically works by repeating an action, while bracketing or suspending its usually intended meaning. In that way, it exposes the medial quality of an expression, independently of whatever meaning is conveyed.

The jest alerts us to the fact of our finitude, to the fact that meaning must occur in something and as something. Our finitude prevents us from seeing ourselves fully in any statement we make. The doubled structure of finitude also means that there is no other access to what we are than through how we are taking place. The jest plays with this 'enabling constraint' as it might be called. In a game of charades, for instance, the prohibition on saying a phrase in any straightforward way compels us to consider all the various ways we might say it might otherwise, and so the jest makes us come to terms with the means, the contrivances and conventions, or gestures that give expression to meaning.

'I Collect Moments'

Kierkegaard gives us a striking account of how a good comic's jests cut through the purpose of an event to get at its ways and means. The Berlin comic Beckmann, he explains,

is not only able to walk, but he is able to come walking. By means of this genius he also improvises the whole scenic setting. He is able not only to portray an itinerant craftsman; he is also able to come walking like one and in such a way that one experiences everything, surveys the smiling hamlet from the dusty highway, hears its quiet noise. He can come walking onto the stage by street urchins whom one does not see.³³

'To come walking' means that the ambulatory intention – where is he going and why – do not matter. The purpose of the walk is suspended, and the communicability of the act, its capacity to show how an event occurs, is what is placed on display. Our interest is no longer in what the gait accomplishes, but in how it takes place. The comic plays back our actions for us – 'comes walking', not to instruct us on how to execute our movements better, and not to offer them as complete aesthetic facts as they might be in dance, for instance. Beckmann, Richard Pryor, Andy Jones or any good comic who moves us does so by making visible this middle ground between the message we intend and the means – devices and apparatuses – through which a message must pass.

There are lots of other unfunny occasions when we might imitate the military gait, the tinkerer's gestures, the prostitute and her client or the way that a body vomits. The clown is not interested in the content or meaning of these actions, but rather in how they occur and even, in the most intense kinds of comedy, in what occurrence itself might mean. At any rate, to make something funny, or to make fun of something, it may

be enough simply to separate the content of an action from the context in which it appears.

This must be what Hans Shier, the protagonist of Heinrich Boll's novel *The Clown*, means when he declares in the signature phrase that recurs throughout the novel: 'I am a Clown. I collect moments.'³⁴ 'Moments' is the word that Shier uses to describe the little turns, pregnant instants and gestures that a clown collects and replays over and again in what is called a 'routine', a term whose mechanical resonance should not be lost on us. Shier does not say, 'I collect actions' (or gestures or word plays), because it is not exactly the particular activities or events that he pursues. It is, rather, the way that even the most banal event, in the hands of a good clown, can be made to convey something about the background conditions and structure of time that make any event at all possible. To 'collect moments' has a special resonance in the context of our present discussion because it suggests, as I will now try to explain, that all these various distinctions we have encountered, such as the conditions and contents of events, enunciation and statement, being and event, eventually lead us back to a single basic opposition between the events that occur in time and the time in which they occur.

Time in finite and divine intuition

Time, as Kant, Bergson and countless others have reminded us, is not a thing. It is, rather, the most general condition of any event. The great sea of being – whether one understands this to be the mind of God or the mathematical complexity of the universe, is always individuated in some specific event. Events always have a thisness and a nowness. Still, while time may be a transcendental condition in which events occur, we can only get at it through the events that it orders and makes possible. Now is always 'now that', Aristotle concludes. Now that it is time to get up, now that we have burned a hole in the ozone layer, now that we are thinking about time. If that is true, then a moment is never available as a pure element without something occurring in it. We only get at time itself through our attention to its resistances and refusals to be counted among the events that it facilitates.

Kant is helpful here in showing us the fundamental relation of time and human finitude. Time, for Kant, is not a thing, but is the *a priori* background condition that lets us experience things, and ourselves as a thing. It is not exactly that time is in us. It might be truer to say that we are in time. Whatever flares up in us as an awareness of self or world is given against a background of time that introduces an irreducible element of contingency.

For Kant, it is the 'intervallic', temporal quality of experience that distinguishes human and divine reason. God's knowledge and human knowledge are each modes of intuiting, or receiving objects of knowledge. Divine knowledge, however, has the distinction of creating the objects that it represents to itself. God is not dependent on things presenting themselves to him, because he is, himself, the originaive source of whatever he 'sees' or 'thinks'. The whole of creation lies *tota simul* – simultaneously whole – before him in a single, undifferentiated moment. Nothing is unknown, and there are no surprises or delays in God's mind. Because everything is already present and at hand for him, God knows nothing other than the ever extended presence of what already is. In God's mind, in other words, there are no tenses. Heidegger says that God's knowledge is 'not achieved in a succession of acts intuiting individual things, but it occurs without succession, all at once in a moment. But it is a moment that lasts not momentarily but remains the same for eternity'.³⁵

Finite, human knowledge, on the other hand, does not create the objects of its intuition. It is non-creative intuition. Finitude, for Heidegger and Kant, does not concern the limits of the senses, or the inevitably of death, but the fact that we have intuition and knowledge only to the extent that some object presents itself to us. Our finitude, Heidegger says, 'consists in the reception of that which offers itself', thus the important and familiar Heideggerian theme of 'thrownness': we are thrown into a world – into a body, into a language – which we did not create, and which nonetheless provides our only means of access to ourselves and to the order of things.

'Intratemporal events', as we might call them, have a repeatable and countable quality. It is always possible to enumerate, and therefore to imitate, the things that occur in time. Events have a measure of regularity and permanence. They produce a routine. They involve signs and activities that can be repeated in other contexts. Their regularity is the basic material of any comic routine and is, in fact, what allows it to be routine.

The sheer fact of occurrence, however – the thisness, or haecceity of an event – is the absolutely singular quality that it does not share with others. All of which is to say that if the clown collects moments, then when he assumes a gait, mimes a face, or replays a story, it is not the events themselves that he wants to collect. Instead, he distills from them the stamp they bear of this individuation, the trace they carry of the enstatement or world entry that runs like a watermark through all events, no matter what activity is occurring in them.

The comic dimension, then, cannot be reduced to any particular set of gestures, or routines. Comedy is a relation to the order and regularity of events. Every comic has a routine, of course. There is always some device that breaks down – mechanical, bodily or linguistic. Bergson reminds us that repetitive, machine action is the real home of the comic. But the whole point of the comic's routinization is to build schemas, devices and machines of one sort or another whose only purpose is to allow us to witness how they break down. The clown builds up an expectation in order to have it come to nothing, to show how they fail to contain the noise and point us to the background conditions or enstatement of the event.

Conclusion: On Failure and Wonder

Failure and wonder

Simon Critchley has recently argued that we should abandon a whole tradition that sees philosophy originate in wonder.¹ It is common to suppose that speculative thought begins with the awe we feel in the sublimity of nature, or the expanse of the universe, or the impenetrability of an others' gaze. The philosophical impulse today originates instead, Critchley argues, in a sense of failure. The promise of modern philosophy from the Enlightenment on is to liberate us from our self-imposed domination, as Kant put it. The barbarism of global capitalism, our ineptitude in controlling the risk of industrial life, the collapse of the grand narratives that underwrote our belief in progress and human science – all of these breakdowns conspire to make us wonder about the relation of life and the artful designs we impose upon it.

I have been trying to show that it is a central premise of Bergson's work that we learn more about ourselves from our mistakes when our schemas fail. The kernel of insight here is that philosophy does not originate in either simply failure or wonder, but that the two are inextricably bound together. For Bergson, failure is the precondition of any sense of wonder. We only gain insight into what reveals itself (*physis*) through some engagement with the things that are made (*techné*).

Heidegger's *antigone*

What we are saying here about laughter is, oddly enough, very close to what Heidegger says about Greek tragedy. At several points in his work in the 1930s Heidegger, turns his attention to Sophocles *Antigone*, in order to distinguish the Greek revelation of truth from its modern technical

presentation. In his *Introduction to Metaphysics*, Heidegger reads these famous lines from the *Ode to Man* in *Antigone*:

He set sail on the frothing waters amid the south winds of winter ... and [he] hunts the beasts of the wilderness and the native creatures of the sea ... And he has found his way to the resonance of the word, and to wind-swift all-understanding, and to the courage of rule over cities.²

The poem is often understood to be a paean to the world of man, his domination of the physical environment and the supremacy of human design over the nature in which it appears. Heidegger reads the poem in an entirely different way. The Greeks imposed their plans on nature, harnessed the wind and water, and fixed their schemas on the contingency of things, not out of a hubristic confidence in their abilities, but as a method of inviting physis to reveal itself. In other words, they wanted to watch and see how things break apart. But notice that the premise here is that physis (what reveals itself) does not precede techne (what is made). We have no immediate access to the taking place, or being of things except through some engagement with techne, which lets us see what it does not capture. David Tabichnick explains that:

The sailor, by harnessing and manipulating the wind and water, is coercing the elements to do his bidding. Likewise, the farmer, hunter and city builder are taking hold of the movement of nature and violently imposing form onto it. But this imposition of form is merely temporary. Eventually, the violence of techne is countered by the violent return of the movement of nature: these products of techne become targets of nature's wrath, destroyed or swept away by the very elements they temporarily harnessed. The products of techne are 'scenes of disclosure' in the sense that, through their destruction, human beings come to recognize the temporality of all things and come to think about, or question, the authentic or primal truth of all of existence. So, by sailing we bring to light the overpowering force of the sea, by hunting we highlight the overpowering pain of hunger, and by building cities that inevitably fall to some sort of disaster we recognize the power of nature to destroy all the more. In all of these things, the limits and finitude of beings come to light through a pushing back by nature. Presumably, without the building of technical products, this coming to light, this disclosure would not occur.³

Laughing machines

Deleuze and Guattari say we are desiring machines. But are we not also laughing machines? Do we not make comic machines that are strong enough to contain the noise of the world, but supple enough to break down and let it come through?

In *The King of Fun* Andy Jones creates a quite brilliant laughing machine. It is a beautifully simple device: he counts laughs. He has an assistant operate a scoreboard, and each time someone laughs, the numbers increase by one. A riotous applause gets ten. This has a most unusual effect on the audience. The visible quantification of their laughter produces a kind of rolling hilarity. Initially, the laughs begin in relation to some joke. But once one laugh is produced in this way, it is registered as a number on a scoreboard, and the registration causes the audience to laugh, and they then laugh at their laughing at the numbers. The effect is something like a perpetual motion machine: the breakdown of a pattern produces laughter. The pattern of the laughter then becomes a system of regularity that can be hijacked and turned against itself. Equally fascinating is the strange role that the comic assumes in relation to his machine. As the laughing meter does its work, Andy Jones ceases to be the comic telling jokes and becomes, for a moment, a bureaucrat who is simply operating the device. He steps out of the function of comedian and appears now to be working together with the audience in some kind of Stanley Milgramesque experiment. Strangely, it is now, when he himself insists on being unfunny, when he is a technocrat counting laughter, that we recognize him as a master comic who can build a device out of anything, even our laughter. He literally makes us laugh, which is to say that he fashions us into a collective device that produces laughter. To get at the timing, the moment of the event, something has to be quantified and then broken down. In the hands of a gifted comic, anything will do. Even the pattern of your laughter.

Notes

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4. For more on Benjamin's relation to Bergson, see Claire Blencowe 'Destroying Duration: The Critical Situation of Bergsonism in Benjamin's Analysis of Modern Experience', *Theory, Culture & Society*, 25(4), July 2008, pp. 139–58, and Peter Fenves, *The Messianic Reduction: Walter Benjamin and the Shape of Time*, Stanford: Stanford University Press, 2010.
5. Michel Serres, *The Troubadour of Knowledge*, Chicago: University of Michigan Press, 1997, p. 6.
6. Reinhart Koselleck, *Futures Past: On the Semantics of Historical Time*, New York: Columbia University Press, 1985.
7. Koselleck, *Futures Past*, p. 37.
8. Niklas Luhmann, *Risk: A Sociological Theory*, Piscataway: Transaction Publishers, 2005.
9. For more on this temporal structure of exchange, see Jean Francois Lyotard, 'Time Today', in *The Inhuman*, Stanford: Stanford University Press, 1991.
10. Teresa Brennan, *History after Lacan*, New York: Routledge, 1993.
11. Dean Bavington, *Managed Annihilation: An Unnatural History of the Newfoundland Cod Collapse*, Vancouver: University of British Columbia Press, 2011.
12. Karl Marx, *Grundrisse: Foundations of the Critique of Political Economy*, New York: Penguin Books, 2005.
13. Paul Virilio, *The Vision Machine*, Bloomington: Indiana University Press, 1994, p. 66.

6 Distracted and Contemplative Time

1. See Bergson, *Matter and Memory*, chapter 1.
2. Thomas Mann, *The Magic Mountain*, New York: Vintage Books, 1967, p. 104.
3. Althusser, Louis, *Montesquieu, Rousseau, Marx*, London: Verso, 1972, p. 78.
4. Mann, *The Magic Mountain*, p. 239.

5. Walter Benjamin, 'The Work of Art in the Age of Mechanical Reproduction', in *Illuminations*, p. 238.
6. Walter Benjamin, Charles Baudelaire, A Lyric Poet in the Era of High Capitalism, London: Verso, 1983, p.132.
7. Benjamin, *Illuminations*, p. 250, n.18.
8. Benjamin, *Illuminations*, p. 238.
9. Benjamin, *Illuminations*, p. 261.
10. Benjamin, *Illuminations*, p. 263.
11. Jameson, 'Postmodernism', p. 27.
12. Georg Simmel, *Metropolis and Mental Life*, Chicago: University of Chicago Press, 1961.
13. Jeffery T. Schnapps, 'Crash (Speed as Engine of Individuation)', *Modernism and Modernity*, 6(1), January 1999, pp. 1–49.
14. J.E. Erichsen, *On Railway Spine and Other Injuries of the Nervous System*, Philadelphia: Henry C. Lea, 1867.
15. Naomi Klein, *The Shock Doctrine: The Rise of Disaster Capitalism*, New York: Random House, 2008.
16. Schnapp, 'Crash', p. 7.
17. Benjamin, 'The work of art in the age of mechanical reproduction', p. 221.
18. Giorgio Agamben, 'The Melancholy Angel', in *The Man without Content*, Stanford, CA: Stanford University Press, 1999.
19. Agamben, 'Melancholy Angel', p. 106.
20. Agamben, 'Melancholy Angel', pp. 106–07.
21. Benjamin, *Illuminations*, p. 263.
22. Blencowe, 'Destroying Duration', p. 139.
23. Karl Marx and Friedrich Engels, *Manifesto of the Communist Party*, Utrecht:: Open Source Socialist Publishing, 2008, p. 10.
24. Karl Marx, *Economic and Philosophic Manuscripts of 1844*, Moscow: Progress Publishers, 1959, p. 28.
25. Circulation deals only with the extremities of intervals. It does not bear on the intervals themselves. Marx says that circulation is 'the mediation of pre-supposed extremes' (i.e., the two moments of capital M and M'). Circulation presupposes some principle of self-renewal that generates the value that is circulated. But because it subsumes the interval of change in the movement of the extremities, an analysis restricted to the sphere of circulation will not be able to account for the creation of value. Circulation presupposes change but cannot posit it. Marx says that the moments of self-renewal have to be thrown into circulation 'like fuel into a fire'. Karl Marx, *Grundrisse: Foundations of the Critique of Political Economy*, New York: Penguin Books, 2005. pp. 254–55.
26. Walter Benjamin, *The Arcades Project*, Boston: Harvard University Press, p. 801.
27. Benjamin, *The Arcades Project*, p. 802.
28. Benjamin, *The Arcades Project*, p. 801.
29. Benjamin, *The Arcades Project*, p. 804.
30. Benjamin, *The Arcades Project*, p. 801.
31. For a good discussion of the peculiar dialectic of involvement and distance that make up the scholarly life see Pierre Bourdieu, *Pascalian Mediations*, Stanford: Stanford University Press, 2000.

7 Empty, Homogeneous Time/Any-Moment-Whatever

1. Deleuze, *Cinema II*, p. 82.
2. Julia Kristeva, 'Women's Time', in Toril Moi (ed.), *The Kristeva Reader*, New York: Columbia University Press, 1986, pp. 187–213.
3. See F.W. Marinetti, 'The New Religion Morality of Speed', in Lawrence S. Rainey, Christine Poggi and Laura Wittman (eds), *Futurism: An Anthology*, New Haven: Yale University Press, 2009, pp. 224–9.
4. Quoted in Stephen Kern, *The Culture of Time and Space, 1880–1918*, Cambridge: Harvard University Press, 1983, p. 27.
5. I am summarizing an argument I have developed in detail in my essay 'The Oscillating Now: Heidegger on the Failure of Bergsonism', *Philosophy Today*, 41(3), Fall 1997, pp. 405–23.
6. The most important texts of Heidegger's on his relation to Bergson are *Basic Problems of Phenomenology*, Bloomington: Indiana University Press, 1982, pp. 229 ff., *Being and Time*, New York: Harper and Row, 1962, pp. 550–1, and *Metaphysical Foundations of Logic*, Bloomington: Indiana University Press, pp. 203 ff.
7. Jacques Derrida, *Of Grammatology*, Baltimore: Johns Hopkins University Press, 1976, p. 142.
8. Aristotle, *Physics Books III and IV*, Oxford: Clarendon Press, 1986, p. 41 (217b32).
9. Bergson, *Time and Free Will*, p. 108.
10. Jean Hyppolite, 'Aspects diverse de la memoire chez Bergson', *Revue internationale de philosophie*, October, 1949, p. 472.
11. Deleuze, *Cinema II*, p. 82.
12. Deleuze, *Cinema I*, p. 219, note 15.
13. Paul Valery, *Masters and Friends*, Princeton: Princeton University Press, 1968, p. 342.
14. Bergson, *Matter and Memory*, p.12.
15. See Bergson, *Matter and Memory*, chapter 2.
16. Pierre Bourdieu, *Practical Reason: On the Theory of Action*, Stanford: Stanford University Press, 1998.
17. Deleuze, *Difference and Repetition*, p. 98.
18. Deleuze, *Difference and Repetition*, p. 79.
19. Edmund Husserl, *The Phenomenology of Internal Time-Consciousness*, Bloomington: University of Indiana Press, 1964, pp. 68 ff.
20. Husserl, *Phenomenology of Internal Time-Consciousness*, p. 85.
21. Time-lapse photography might be thought of as a kind of reproductive memory. The lapse eliminates the period between distinct tensed events, in order to more effectively direct our attention to a formal resemblance which two different images share. Usually, time lapses forward. We see a tree grow from seed to full maturation, or a child become old, in the span of a few seconds. However, since the formal resemblance is given independently of the time it takes to actualize it, it ultimately does not matter whether the photography lapses forward or backward. For example, Jean Cocteau, in *La Villa Santa Sospir*, picks up a wilted cut flower, and we then see the flower freshen itself, and Cocteau's hand reattach it to a living stem. Peter Greenaway uses yet another variation to achieve similar effects of formal

resemblance. He has a thumbnail frame appear in the corner of the screen in which a succeeding shot already plays in what will have been its antecedent. In both cases, our attention is directed to the formal resemblance between two different tensed events: an indeterminate, antecedent, and the succeeding image in which it will be determined.

22. Deleuze, *Difference and Repetition*, p. 276.

23. Deleuze, *Cinema II*, p. 99.

24. Deleuze, *Cinema II*, p. 9.

8 Compromise Formations: Bergson's Vitalism

1. Henri Bergson, *Laughter: An Essay on the Meaning of the Comic*, London: Dover Books, 2005.
2. Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences*, London: Tavistock, 1970.
3. Martin Heidegger, *Kant and The Problem of Metaphysics*, Bloomington: Indiana University Press, 1997, p. 31.
4. Michel Foucault, *The History of Sexuality*, vol. 1, London: Vintage, 1990.
5. Agamben, *State of Exception*.
6. Karl Marx and Frederick Engels, *The Communist Manifesto*, London: St. Martin's, 1999.
7. Martin Heidegger, *Being and Time*, New York: Harper and Row, 1962; Sigmund Freud, Dissection of the Personality, in *New Introductory Lectures in Psychoanalysis*, New York: Norton, 1990.
8. Simon Critchley, *Infinitely Demanding: Ethics of Commitment, Politics of Resistance*, London: Verso, 2007; Judith Halberstam, *The Queer Art of Failure*, Durham: Duke University Press, 2011.
9. All of these ideas are developed in chapter 1 of Bergson, *Matter and Memory*.
10. Our representation of matter is the measure of our possible action upon bodies: it results from the discarding of what has no interest for our needs, or more generally, for our functions. Bergson, *Matter and Memory*, p. 38.
11. Simon Critchley, *On Humor*, New York: Routledge, 2002, pp. 6–7.
12. Bergson, *Laughter*, p. 86.
13. Roland Barthes 'Garbo's Face', in *Mythologies*, London: Hill and Wang, 1972, 96–7.
14. Bergson, *Laughter*, p. 93.
15. Marshall McLuhan, *The Relation of Environment to Anti-Environment*, Berkeley: Ginko Press, 2005.
16. Helmut Plessner, *Laughing and Crying: An Essay on the Limits of Human Experience*, Evanston: Northwestern University Press, 1970.
17. Bergson, *Laughter*, p. 64.
18. Bergson, *Laughter*, p. 63.
19. Bergson, *Laughter*, p. 153.
20. Andy Jones, *The King of Fun*. One Man Show performed at the L.S.P.U. Hall, St. John's, Newfoundland, 2002.
21. Bertrand Russell, *A History of Western Philosophy*, New York: Routledge, 2004, pp. 714–22; Wyndham Lewis, quoted in Kern, *The Culture of Time and Space*, p. 27; Max Horkheimer, *Critical Theory: Selected Essays*, London: Continuum,

- 1972, p. 40; Benjamin, *Charles Baudelaire*, p. 144; Alain Badiou, *Deleuze: The Clamour of Being*, Minneapolis: University of Minnesota Press, 199, pp. 98 ff.
22. Bergson, *Laughter*, p. 66.

9 Unanswerable Situations

1. Deleuze, *Cinema II*, p. xi.
2. Deleuze, *Cinema II*, p. 2.
3. Deleuze, *Cinema II*, p. 1.
4. Deleuze, *Cinema II*, p. 4.
5. Deleuze, *Cinema II*, p. 1.
6. Deleuze, *Cinema II*, p. 1.
7. Samuel Weber, *Benjamin's Abilities*, Boston: Harvard University Press, 2010, p. 112–113.
8. Benjamin quoted in Samuel Weber, *Benjamin's Abilities*, p. 112.
9. Sigfreid Gideon, *Mechanization Takes Command: A Contribution to Anonymous History*, Oxford: Oxford University Press, 1948.
10. Walter Benjamin, *Understanding Brecht*, London: Verso, 1977, p.11.
11. Brigid Doherty, 'Test and Gestus in Brecht and Benjamin', *MLN*, 115, 2000, pp. 442–81.
12. Samuel Weber, *Theatricality as Medium*, New York: Fordham University Press, 2004, p. 46.
13. Weber, *Benjamin's Abilities*, p. 112.
14. Benjamin, *Understanding Brecht*, p. 24.
15. Benjamin, quoted in Weber, *Benjamin's Abilities*, p. 109.
16. *Benjamin's Abilities*, p. 24.
17. Catherine Mills, *The Philosophy of Agamben*, Montreal: McGill Queen's University Press, 2008, pp. 127 ff.
18. Michel Foucault, *Discipline and Punish: The Birth of the Prison*, New York: Vintage, 1978, p. 138.
19. Giorgio Agamben, 'Notes on Gesture', in *Means without Ends*, Minneapolis: University of Minnesota Press, 2000, p. 49.
20. Agamben, 'Notes on Gesture', p. 50.
21. Agamben, 'Notes on Gesture', p. 50.
22. Bergson, *Matter and Memory*, p. 209.
23. Agamben, 'Notes on Gesture', p. 53.
24. Agamben, 'Notes on Gesture', p. 57.
25. Quoted in Agamben, *Potentialities: Collected Essays in Philosophy*, Stanford: Stanford University Press, 2000, p. 79.
26. Benjamin had pursued a very similar idea in his essay on the task of the translator when he said that the translation must come to terms with something like the being of language. See Walter Benjamin, 'The Task of the Translator', in *Illuminations*.
27. Agamben, 'Notes on Gesture', p. 58.
28. Giorgio Agamben, *Nudities*, Stanford: Stanford University Press, 2011, p. 85.
29. Agamben, 'Notes on Gesture', p. 59.
30. Werner Hamacher, 'Afformative, Strike', in Walter Benjamin, *Philosophy: Destruction and Experience*, ed. A. Benjamin and P. Osborne, New York: Routledge, 1994, p. 129.

31. Agamben, 'Notes on Gesture', p. 59.
32. Giorgio Agamben, 'The Author as Gesture', in *Profanations*, Cambridge: Zone Books, 2007, p. 72.
33. Kierkegaard, quoted in T.W. Adorno, 'Chaplin Times Two', *The Yale Journal of Criticism*, 9(1), 1996, p. 58.
34. Heinrich Boll, *The Clown*, New York: Melville House, 2010.
35. See Heidegger, *The Metaphysical Foundations of Logic*, p. 57.

Conclusion: On Failure and Wonder

1. Critchley, *Infinitely Demanding*.
2. Heidegger, *Introduction to Metaphysics*, pp. 146–7.
3. David Tabichncik, 'The Tragic Double Bind of Heidegger's *Techné*', *Phaenex: The Journal of the Existential and Phenomenological Theory and Culture Society*, 1(2), 2007, pp. 96–7.

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